FOREWORD

The present monograph of *Caraka Samhitā* is the first of a series of studies being published by the National Institute of Sciences of India which in 1959 constituted a Board for the compilation of a History of Sciences in India Several bibliographies and monographs are now ready and their publication will be taken up as and when funds become available

The work of the Board has now been taken over by the National Commission for the History of Sciences in India, inaugurated on January 15, 1965, by Shri M C Chagla, the Union Minister of Education

This monograph offers a scientifically classified account of the contents of *Caraka Samhita*, one of the two earliest and most renowned medical treatises of ancient India Of these two treatises, *Caraka Samhitā* and *Suśruta Samhitā*, dealing respectively with medicine and surgery in the main, *Caraka* is admittedly the more ancient, though both have passed through repeated recensions by later and more advanced workers The significance of these treatises lies in the rational basis of their concepts and discourse, and in their adoption of scientific terminology

No definite date acceptable to all, could however be assigned as to the composition of *Caraka Samhita*, though its antiquity is not generally challenged The extant *Caraka* is a redaction by Drdhabala of the genuine *Caraka Samhita*, which was itself a redaction by Caraka of the original work of Agnivesa, a disciple of Ātreya Punarvasu—a teacher in the University of Taxila during the age of Buddha Caraka has been identified by some scholars with a physician of the same name in the court of the Indo Scythian king Kaniska, who reigned in the second century A D From a consideration of internal and external evidence many authorities are of opinion that *Caraka Samhita* is more or less a record or compilation of the deliberations of a congress of medical experts in ancient India held in the early Buddhistic era Hence the progress of scientific knowledge in ancient India, as recorded in the medical treatise of Caraka the most celebrated of the early Indian authors on the subject, may be compared with that of contemporary Greece, as represented by the works of Hippocrates It has therefore, been assumed by some western scholars that the medical knowledge, as expounded by Caraka, betrays some acquaintance with the works of that Greek author, though they have failed to advance any convincing proof

This synoptic survey is well documented and its authors have taken good care of avoiding all attempts at improving upon Caraka's concepts and views in order to give them an air of modernity, which often unfortunately occurs in the case of many modern publications on ancient texts This will help ensuring a proper assessment of the standard of scientific knowledge prevailing in India during the time of Caraka The work will therefore, serve as a record of reliable source materials for the compilation of a history of Indian medicine *A similar survey of the contents of Suśruta Samhita is now in progress* Students of medicine and pharmacology particularly those interested in research will find the publication quite useful Moreover, it will contribute in no small measure towards the preparation of scientific terminology in Indian languages so urgently needed at the present moment

The Convener desires to express on behalf of the retiring Board its appreciation of the meticulous care and scholarship with which Prof P Ray with the assistance of Shri Hirendra Nath Gupta, has carried out the task The monograph will be welcomed by a wide circle of interested readers

I do confidently hope that the book will not fail to achieve the purpose it has in view

D M Bose
Convener

February 4 1965

PREFACE

In the present work a synoptic survey of the *Caraka Samhita*, a well known medical treatise of ancient India, has been made The concepts, processes, methods, and materials, which occur in the treatise in a scattered manner, interspersed with an abundance of metaphysical disquisitions and with frequent reference to Vedic gods and hymns, have been co ordinated and systematized from a scientific point of view Most of the materials have been arranged in tabular forms for ready reference and rapid survey Wherever necessary, and as far as possible, both English and Latin equivalents of all Sanskrit names and terms have been supplied to avoid ambiguities in their identification

This is possibly the first attempt at rendering in English on a scientific basis the salient features of the views and observations of Caraka in a classified manner in order to make them accessible to all those English speaking scholars, who may not have time and opportunities to go through the original Sanskrit text, or its English translations that are available We would like to acknowledge here the valuable help we have received from these translations

A proper assessment of the standard of scientific knowledge, particularly of medical science, acquired by the ancient Indians at a time prior to Galen, if not even much earlier as upheld by some scholars, is thus likely to be facilitated Students of medicine and pharmacology, interested in research work, are also expected to find this publication particularly useful for their purpose

In preparing this synopsis we have made use of the following editions of the text, and have consulted the available commentaries and translations

1 *Jalpakalpataru*, the complete text of *Caraka Samhita*, edited by Kaviraja Gangadhara with commentary, Vols I III Second Edition, Calcutta, 1880 81

2 *Caraka Samhita*, complete text with Cakrapāṇi's commentary, edited by Harinatha Visarada Calcutta, 1892

3 *Caraka Samhitā*, edited by Shree Gulabkunverba Ayurvedic Society, with introduction, commentary and indices including English, Hindi and Gujarati translations, Vols I-VI Jamnagar, 1949

4 *Caraka Samhita* (*Agnivesa Samhita* as revised by Caraka and Drdhabala), with *Āyurveda Dipikā*, the commentary of Cakrapāni Datta, edited by Vaidya Jādavaji Trikamji Āchārya, third edition Nirnaya Sagar Press, Bombay, 1941

References in the present work to the chapters and verses in the original text follow the numberings given in the two last named publications

For botanical and zoological names the following authoritative works served as the principal source of our information

1 *Flora of British India* by J B Hooker, Vols I VII London, 1872 1897

2 *Pharmacographica Indica* by W Dymock *et al*, Vols I IV London, Bombay, and Calcutta, 1893

3 *Indian Medicinal Plants* by R N Chopra, Patna, 1932

4 *The Fauna of British India* (including Ceylon, and Burma) Taylor and Francis, London, 1949

5 *Sanskrit English Dictionary* by M Monier Williams Oxford, 1951

In spite of all our precautions, we are quite conscious of the possibility of mistakes and errors, still occurring in this synopsis and we shall be thankful to our readers for bringing them to our notice, if they happen to find any

The following abbreviations have been used

Sū —Sutrasthana, Ni —Nidanasthāna, Vi —Vimanasthana, Śā —Śarirasthana, In —Indriyasthana, Ci —Cikitsasthana, Ka —Kalpasthana, Si —Siddhisthana

We take this opportunity of expressing our grateful thanks to Pandit N C Vedantatirtha of the Asiatic Society for his kindly going through the final proof and verifying the Sanskrit names and terms Our thanks are also due to Mrs S Mitra, Sub editor, National Institute of Sciences of India, for her *ungrudging assistance in reading the proofs and in seeing the work through the* press We must also express our great appreciation for all facilities we have received from the authorities of the Asiatic Society for working in their library Finally, we wish to acknowledge our thankfulness to Dr D M Bose, Convener, for his keen interest in the work, carried out under the auspices of the National Institute of Siences of India Above all, we consider it our bounden duty to offer our grateful thanks to Dr A C Ukil who, as the President of the N I S I, *took the main initiative in organizing* the scheme for compiling a History of *Sciences in India* and, *as the first convener of its Board* evinced a great interest in our work with all possible encouragement and help

We would also like to record here our appreciation of the patient co opera tion of Sree Saraswaty Press Ltd, Calcutta, in bringing out this publication

P Ray
H N Gupta

CONTENTS

I AUTHORSHIP AND DATE OF COMPOSITION

The *Caraka Samhita* (literally, treatise compiled by Caraka) is a Sanskrit work of great antiquity Though primarily a compendium on "Āyurveda' (science of life), the philosophical concepts and views that form a considerable part of the *Caraka Samhitā*, serving, as it were, as the background of knowledge and practice of medicine in ancient India, must be considered an integral part of the work

It is difficult, if not altogether impossible, to fix an exact date for its composition, *or even to identify its author with any certainty The only text* available at present is a redaction by Drdhabala of the 9th century A D, who *repeatedly mentioned in the body of the text that he merely edited an ancient* work of this name, restoring and reconstructing some missing passages In *fact, a major portion of the last book of the* Samhita, Siddhisthana, *was added* by him

The text gives a detailed account of how the *Caraka Samhita* was originally composed A conference of sages, meeting somewhere in the Himalayas, with the common object of alleviating human suffering and assuring a long, healthy and satisfying life to all, decided to take all steps to acquire the necessary knowledge for that purpose (*Sū* Chap 1) Later, one of these sages, Ātreya Punarvasu by name, requested six of his disciples to compile his teachings in writing (*Su* Chap 2) The treatise of Agniveśa was considered the best, and the Samhitā of Agnivesa, revised by Caraka at some later date, formed the basis of Drdhabala's edition In fact, the major portion of *Caraka Samhitā* is presented in the form of questions and answers between the disciple Agnivesa and his teacher Ātreya

There is no reason why this account, as far as the sequence of authorship is concerned, should not be accepted as correct Cakrapani Datta (11th century) in his commentary *Āyurvedadīpika* on *Caraka Samhita* practically asserted the identity of the latter with the original *Agniveśa Samhita*, of which he seemed *to have a full knowledge*

A great deal of difficulty is however encountered, when we try to identify Ātreya, Agniveśa, and Caraka with authors of the same names mentioned in Brahmanical, Buddhistic, Chinese and Arabic literatures Some of these names are found to occur as early as the Vedic period (2nd millenium B C) and some as late as the early centuries of the Christian era It had been a common practice in India, for scholars of lesser fame to assume the titles of their more renowned predecessors in their particular fields with a view to fixing a stamp of authority on their own works This fact introduces an element of un certainty in any tentative chronology

Most of the hymns of the fifth Mandala of the *Rgveda* are attributed to Atri or to Ātreya Again, Ātreya is the name of a famous medical teacher at Taxila, who, according to many Buddhistic and Chinese texts, was the preceptor of Jivaka, the personal physician of Gautama Buddha (6th century B C) But the Ātreya of *Caraka Samhitā* is Ātreya Punarvasu, son of Candrabhāga (*Sū* **13,** 99), whereas no Vedic text, Buddhistic source or Chinese work even mentions the title Punarvasu, or the parentage The *Caraka Samhita* itself makes a mention of yet another Ātreya (*Su* **I,** 9) Nowhere does it mention Taxila as Ātreya s place of residence On the contrary, Punarvasu Ātreya is described as taking a walk in Kāmpilya, a city on the river Ganges (*Vi* **3,** 3) Though the possibility of an excursion, or of migration, cannot be ruled out, there is nothing to support his identity with the teacher of Jivaka, except the surname Ātreya, which is derived from the name Atri and means a descendant or follower of Atri The identification of the author of *Caraka Samhita* with the teacher at Taxila, made by Rudolf Hoernle (*Bower Manuscript* Introduction, p lviii), is not based therefore on any convincing evidence

As for Agnivesa, the *Mahabharata* refers to one Agnivesa as receiving the knowledge of *dhanurvidya* (science of archery) from Bharadvaja (Ādiparva, slokas 5107 and 5108), whereas in the *Caraka Samhita* Agnivesa is merely a disciple of Ātreya, who in his turn received his knowledge of Āyurveda also from one Bharadvaja (*Su* Chap 1) Here again an identification would be hazardous

The Chinese text of *Tripitaka* names one Tehe lo kia (i e, Caraka in Sanskrit) as a trusted physician in the court of the king Kaniska (c 200 A D) *in the north west of India* This Caraka has been identified by Sylvain Levi (Notes sur les Indo Scythes in *J A* 1896, pp 451 480) and by Hoernle (*Studies in the Medicine of Ancient India* Part I, p 9) with the author of the *Caraka Samhita* Here again, the identification is far from convincing, for, the name and title of Caraka (literally, a wanderer) has been found in many places and contexts in ancient Indian literature and is, in fact, associated with a particular school of medical knowledge Reference to this is found in the *Black Yajurveda* (L Renou, *Écoles Védique*, p 129, 144, etc) The *Taittirya Samhitā*, known to *be a work dating from more than a thousand years before the Christian era,* also speaks about the Caraka School of medicine, though not in complimentary terms (*Taittirya Samhita*, VI, 4, 9) It is more than possible that all subsequent Carakas, including the court physician of Kaniska were later exponents of this medical school, and centuries might have elapsed between any two *holders of this name or title*

From passages in Cakrapani Datta s *Āyurvedadipika* and in Sivadasa Sena s commentary on the latter work (12th century A D), it appears that Patanjali, the famous grammarian (c 2nd century B C) and a great alchemist, also revised *Caraka Samhita* If these are to be believed Caraka cannot by any

stretch of imagination be placed in the court of Kaniska three or four centuries later

It is therefore extremely difficult to give any definite date when Ātreya, Agnivesa or Caraka of our text might have flourished

P C Rây (*History of Hindu Chemistry*, Vol I, Introduction, pp xiii—xxiii) after considering all internal and relevant evidence places the date of composition of *Caraka Samhitā* in the pre-Buddhistic period, i e, before 600 B C His arguments are summarized below

1 The text of Caraka is written in a haphazard and unsystematic style, intermingled with metaphysical disquisitions in sharp contrast with the precise style of works composed in the Buddhistic and later periods

2 Vedic gods and *mantras* occur repeatedly, but references to Paurānic mythology and Buddhistic scriptures are conspicuous by their absence

3 Caraka follows Vedic texts in counting the number of bones (360) in the human body, and in assuming the age of thirty as the limit of man's youth

4 The prose style of Caraka resembles that of the Brahmanas of the Vedas

5 The treatise appears to be a record of the deliberations of Vedic *ṛṣis*, often giving their discussions in full (vide discourse on tastes, *Su* Chap 26) and clearly mentions that it was composed shortly after those deliberations

6 Patañjali (2nd century B C) is known to have made a redaction of the *Caraka Samhita*

Jean Filliozat (*La Doctrine classique de la Médicine Indienne*, pp 17-19) also believes that significant references found in the text, the stage of development of the language employed, and careful comparison with other works of established dates, can give a more reliable idea of the date of composition than the names and dates of supposed authors He, however, considers the style and composition definitely post Vedic and having considerable affinity with the *Arthaśāstra* of Kauṭilya (3rd century B C) According to him, the *Caraka Samhitā* was composed in a period which antedates the Christian era, but not by a very long period He gives the 2nd or 1st century B C as the most probable date

Some workers (Filliozat, *loc cit*, and Gananath Sen, *Pratyaksa Sāriram* Vol I, 8 11) have identified Caraka with Patañjali, but the evidence in support of this view is not very convincing

Winternitz (*History of Indian Literature*, part I) assigns 100 A D as the approximate date of *Caraka Samhita*, and the Chronology Committee of the National Institute of Sciences of India (*Proceedings*, 1952) after considering all available evidence adopted this date for the text, which formed the basis of Dṛḍhabala's redaction

II. SCOPE AND SUB-DIVISIONS OF THE TREATISE

Caraka Samhitā is primarily an exposition of Āyurveda, the science of life, defined as the science of the causes and symptoms of diseases, of their medication, and of the maintenance of health (*Sū.* **1**, 23). It also deals with the origin of medical science, the fundamental causes of conception and birth, and of physical deformities. According to Caraka, life is everlasting and without any beginning. Āyurveda, the science of life, has also been always in existence (*Sū.* **30**, 27).

The treatise contains a detailed classification and nomenclature of diseases—their etiology, diagnosis, prognosis and treatment. Embryology, obstetrics, *anatomy, physiology*, personal *hygiene, sanitation, training and duties* of physicians, and other theoretical and practical aspects of medicine are also treated in some detail. Interspersed in the text are passages which give valuable indications of the cosmological, biological, physicochemical, metaphysical, ethical and philosophical ideas prevalent in India at the time.

According to Caraka, Āyurveda has got eight branches (*Sū.* **30**, *30*) :

(1) *Kāyacikitsā*, therapeutics.

(2) *Śalakya*, the science of the special diseases of the eye, ear, nose, mouth, throat, etc.

(3) *Śalyāpahartṛka*, surgery.

(4) *Viṣagaravairodhikapraśamana*, toxicology.

(5) *Bhūtavidyā*, psychiatric knowledge.

(6) *Kaumārabhṛtya*, pediatrics.

(7) *Rasāyana*, rejuvenation.

(8) *Vājikarana*, knowledge for increasing virility.

The *Caraka Samhitā* is an exhaustive compendium on therapeutic medicine and claims to contain all that is to be known in this branch (*Si.* **12**, 53), though it contains sections devoted to the other seven branches.

The scope of the treatise is stated to be limited to ten specific topics (*Sū.* **30**, 32):

(*i*) *Śarīra, anatomy*.

(*ii*) *Vṛtti*, physiology.

(*iii*) *Hetu*, etiology.

(*iv*) *Vyādhi*, pathology.

(*v*) *Karma*, treatment.

(*vi*) *Kārya*, objectives.

(*vii*) *Kāla*, the influence of age and seasons.

(*viii*) *Kartṛ*, physicians.

(*ix*) *Karana*, medicines and appliances.

(*x*) *Vidhiviniścaya*, procedure and sequence.

For a discussion of the above topics the treatise is divided into eight sections (*Sū* 30, 35)

(1) *Sutrasthāna* deals with general principles, philosophy, etc
(2) *Nidanasthana* deals with causes of diseases
(3) *Vimanasthāna* deals with taste, nourishment, general pathology, etc
(4) *Śarirasthāna* deals with anatomy and embryology
(5) *Indriyasthāna* deals with diagnosis and prognosis
(6) *Cikitsasthāna* deals with treatment of diseases
(7) *Kalpasthāna* deals with pharmacy
(8) *Siddhisthana* deals with cure of diseases

In all, there are one hundred and fifty chapters on specific topics There are at places some later revisions or interpolations, as repeatedly admitted by the redactor at the end of each and every chapter In fact, Drdhabala states that he had to rewrite and complete the last section *Siddhisthāna* from the materials available to him (*Si* 12, 55) The twelfth or last chapter of this section was not available at all and had to be restored by him in order to complete the treatise (*Si* 12, last *śloka*)

III CONCEPTS AND THEORIES

(*a*) MAN AND MATTER AIM OF MEDICAL SCIENCE

Man, according to Caraka, is an epitome of the macrocosm (*Śā* 5, 3) Following the philosophical doctrines of Sāmkhya and Vedānta, Caraka holds (*Śā* Chap 5) that the individual is a replica of the universal, both the external world and the individual man are the manifestations of one and the same eternal spirit (*Brahman*) In other words, spirit and matter are not two separate entities but one integral whole Both man and the visible world are composed of six elements *Pṛthvī* (earth), *ap* (water or liquid), *tejas* (fire), *vayu* (air) and *akaśa* (ether) are common to both The sixth element, the spirit or self in the individual, is equivalent to *Brahman* in the universe (*Śa* 5, 4) *Pṛthvi* confers hardness, *ap* confers fluid constituents, *tejas* the body heat, *vayu* the vital breath, *akaśa* the bodily orifices and *Brahman* the spirit (*Śa* 5, 5) Similar to the office of the creator in the universe is the might of the individual soul in man He also creates life by the act of impregnation (*Śā* 5, 6) Like the diverse things present in the universe, the different entities comprising the human being are too numerous to count (*Śa* 5 4) There is in man as much diversity as in the world outside (*Śā* 5, 3)

The human body is made up of innumerable minute parts which, because of their extreme fineness, are invisible and not amenable to sense perception These may be compared to the cells of the body, as we now understand (*Śa* 7, 17)

According to Caraka there are four criteria of truth (*a*) authoritative

testimony (*b*) direct observation, (*c*) logical assumption (*d*) inference Any thing contrary to reason is to be rejected as untruth, (*Su* 11 17, 26 28) To this might also be added (*e*) tradition and (*f*) analogy (*Ii* 8 33)

The realization of truth or perfect knowledge by man arises from the sense of equality, i e, from the perception of his own self as identified with everything else in the universe (*Śa* 5, 7) or from the perception of the unity of the whole world (*Śa* 5 8) The purpose of life is the attainment of liberation, or emancipation of the soul, which consists in the understanding and realization of truth, leading to eternal peace This cannot be achieved merely by rituals, ceremonial practices keeping up the sacred fire, invocations mendicancy, austerities, asceticism, etc (*Śa* 5, 10)

A sound mind and a sound body were regarded as prerequisites for the beatific experience of the Divine or *Brahman* in man The aim and object of the study and pursuit of medical science with this end in view was thus defined in the *Caraka Samhita* (*Śa* 5, 10) For, it serves as an aid to the fulfilment of fourfold purposes of life, namely, *dharma* (performance of duties), *artha* (acquisition of wealth), *kama* (satisfaction of desires), and *moksa* (salvation or self realization) (*Su* 1, 15 16)

Life, according to Caraka, can be divided into four types *sukhamayuh* (happy life) is a life not affected by physical or mental diseases *asukhamayuh* (unhappy life) is the opposite of this, *hitamayuh* (good life) is a virtuous life devoted to the service and welfare of others, *ahitamayuh* (bad life) is the opposite of this The object of the science of life is to provide information about what tends to develop all these four kinds of life and to determine *their* span (*Su* 30 23 24)

All matter is composed of the five *mahabhutas* (gross elements) *akaśa* (vacuum or ether), *vayu* (gas or air), *tejas* (radiant energy) *ap* (liquid or water) and *prthvī* (solid or earth substance) (*Śa* 1, 27) The gross *bhutas* show five subtile characteristics non resistance motion, heat, fluidity and hardness *Ākaśa* has the sole quality of non resistance In each succeeding element there is found the preceding element or elements with their characteristic properties, as well as its own specific quality (*Śa* 1, 27 29)

Living things are composed of the *mahabhūtas* and three other constituents *avyakta* (*atman* or unmanifest self), *buddhi* (intelligence) and *ahamkara* (ego) Thus they have the eight fold *prakrti* (*natural characteristics*) (*Śa* 1 63) The ego is made up of action the consequences of action reincarnation and memory, and is independent of the physical body It can exist without the latter (*Śa* 1 52)

The five *mahabhūtas* together with the spirit, mind time and space, constitute the totality of all substances (*Sū* 1, 48) They are perceptible to the senses or to the mind (*Sū* 1, 62) But they cannot exist singly or without purpose, being ephemeral by nature they cannot escape destruction (*Śā* 1, 58)

Of the substances, those which possess sense organs are called animate, and those which do not are called inanimate The *gunas* represent the sense properties of colour, taste, smell, touch, and hearing, besides the mechanical and other properties which all elements have in common (*Su* **1**, 48 50)

All senses are mere variations of the five *mahābhūtas*, but each sense partakes of one *mahabhūta* in a preponderating degree and possesses a special capacity for grasping that particular *mahabhūta* (*Sū* **8**, 14)

Conscious perception arises from the fusion of the *atman*, mind, senses and sense objects (*Śa* **1**, 34) This fusion cannot be achieved by accident, an agent is necessary (*Śa* **1**, 44) The ultimate source of consciousness and knowledge is the *Purusa* or transcendent self (*Śā* **1**, 41) The *Purusa* has no beginning in time it is not manifest to the senses, cannot be realized except by inference and does not come under any known category (*Śa* **1**, 60 and 62) It is everlasting, all pervading and changeless (*Śa* **1**, 61) Had there been no *Purusa* there would have been neither good nor evil, no knowledge, no doer and no knower (*Śa* **1**, 39) All these would be causeless Neither could there be any awareness of these, nor would they serve any purpose by their existence (*Śa* **1**, 42) There would have been no dissolution nor creation, no birth nor death, no continuity of life, no consciousness nor perception, no pleasure nor pain, no dynamic nor static condition, no science nor scripture, no bondage nor liberation, if there were no *Purusa* (*Śā* **1**, 38-41)

Caraka holds that life results from the combination of the body, the senses, the mind and the self (*atman*) and that it rests on the body, the mind and the self, as on a tripod If therefore, any of these supports be missing, life ceases to exist (*Su* **1**, 42, 46) As already stated, transcendent self (*parah atmā*) is different from manifest self which participates in the union of the body, mind and the senses (*Su* **1**, 41, 45, 47, 55 56)

(*b*) Conception and Birth

There are four different origins of living beings womb egg, sweat, and the seed Each of these classes shows countless varieties The viviparous and oviparous embryos assume the shape of such wombs as they find themselves in, though they originate from a complex of causative factors (*Śa* **3**, 16)

Conception occurs inside the womb by the union of semen, ovum and the spirit (*Sa* **4** 5) By the physical act of mating union takes place between the semen (sperm cell) and the female ovum (germ cell), then the spirit, associated with the mind, descends and enters into the zygote formed, and a new embryonic life is created (*Śa* **3**, 2) If the spirit does not descend, no life is created and conception fails to occur (*Śa* **3**, 11) The conscious spirit gravitates to the needed ingredients it creates its own body by gathering the elements together—first the *ākaśa* (ether) alone, then in due order the other *bhūtas* The process is completed in an infinitely small fraction of time (*Śa* **4**, 8)

The conception of all living beings originates from the combined contribution of the mother, the father, the spirit, the essence of the elemental properties and nourishment (*Śā.* 3, 3). It is the mind which yokes the living organism to the spirit and holds the senses together. With the departure of the mind, the organism becomes a lifeless matter (*Śā.* 3, 13).

The spirit in the embryo is the embodied soul. The soul is eternal, diseaseless, decayless, ageless, deathless, indivisible, indestructible, immovable, omniform, omnifunctional, immutable, invisible and infinite (*Śā.* 3, 8).

Hence, there is no birth in the true sense. What we call birth is the mere transition of the already existing sperm, ovum and spirit to the new status of embryo after their union (*Śā.* 3, 8). The spirit is the eternal self and passes through a succession of forms, having no beginning. Life and the spirit, both are without beginning and neither is antecedent to the other (*Śā.* 1, 82).

(*c*) Heredity and Embryonic Growth

Caraka assumes that the sperm-cell (*bīja*) of the male parent contains minute elements derived from each of his organs and tissues (*Śā.* 4, 7). A rational explanation is attempted of the fact that offsprings do not necessarily reproduce every feature of the father, and even a particular womb does not produce identical features in every embryo conceived in it.

A human womb invariably produces a human child in the manner of a wax-mould (*Śā.* 3, 16), but children differ in many important respects from their parents (*Śā.* 3, 17). They may be males or females, twins, multiplets (*Śā.* 2, 11), possessed of sexual abnormalities (*Śā.* 2, 31) and may have individual characteristics and deformities (*Śā.* 2, 28-29).

When the sperm (*śukra*) is dominant, a male foetus is formed, but a female is produced when the female germ (*śonita*) predominates (*Śā.* 2, 12). If the united sperm-ovum gets divided into two or more fragments, a corresponding number of new lives are created (*Śā.* 2, 14). In this case a male is formed from a fragment rich in sperm and female from one rich in ovum (*Śā.* 2, 13). Non-identical twins or multiplets result from unequal fragments (*Śā.* 2, 16). Indeterminate sex and abnormalities occur when neither the sperm nor the ovum predominates, or when they are diseased and weak (*Śā.* 2, 18-21).

Caraka also attempts to explain why congenital deformities of the parents, or constitutional diseases contracted by them in later life, are not necessarily inherited. According to Ātreya's view given in the text (*Śā.* 3, 15), the parental *bīja* (seed or germ-plasm) contains the whole parental organism in a potential or miniature form but is independent of the parents' developed organs, and is not necessarily affected by their idiosyncrasies or deformities. It is the combination and characters of the constituent elements of the parental *bīja*, which is an organic entity independent of the developed parental body and its organs, that determine the physiological features and predispositions

of the embryo Congenital defects like blindness, deafness, dumbness, stammering, lameness, deformity of the spinal column or the bony framework, as well as constitutional diseases like madness, leprosy or chronic skin diseases in the parent, do not necessarily produce corresponding deformities or infirmities in the offspring Only *when an element in the parental bija, representing* a particular organ or tissue accidentally (*daiva*) happens to be defective, undeveloped, or abnormal, the corresponding organ or tissue of the offspring will be similarly affected Again when constitutional diseases, acquired in later life, are found to be inherited, it is supposed that the *bija* has been *infected or affected in that particular instance* Leprosy, for example, is transmitted to the offspring only when *the germ-plasm is actually infected* with the disease by reason of the leprosy of the parent (*Śa* **3**, 15) This mutual interaction of the germ plasm and the somatic tissues seems to be a distinctive feature of Ātreya's hypothesis The continued identity of the germ plasm from generation to generation, affected by somatic processes only by accident or *infection, follows logically from this hypothesis*

Hence offsprings differ from their parents in those tissues and organs whose original representatives in the germ-plasm have been affected by causative factors The sex, stature and complexion of the offspring is also stated to be affected by the influence of abundant or defective nutrition and by the *constituents of foods taken by the parents (Śā* **3**, *5)*

The elements that contribute to the general features of the new born child are (1) the mother's blood, (2) the father's semen, and (3) the *karma* of the individual Its mental traits are determined by the state of the mind of the individual in its previous birth, and will be impure and dull if it was an *animal in the previous birth* (*Śā* **2**, 27)

The embryo inherits its skin, blood, flesh, fat, heart, liver, lungs, spleen, kidneys, stomach, intestines, etc from its mother (*Śa* **3**, 6), its bones, teeth, veins, tendons, ligaments, arteries, semen, hair and nails from its father (*Śa* **3**, 7), its mind, senses, consciousness, ego, memory and life span from the spirit (*Śā* **3**, 10), *its clarity of senses, quality of voice, appetite and vitality* from parental concordance (*Śa* **3**, 11), its visible shape, vigour, sense of contentment and energy from nourishment (*Śa* **3**, 12)

The embryo is a shapeless jelly (*khetabhūta*) in the first month (*Śa* **4**, 9) and a tumour-like or fleshy shape in the second By this time *there is the first indication of the future sex of the embryo* (*Śā* **4**, 10) In the third month the limbs and sense organs are no longer latent but emerge as separate entities (*Śā* **4**, 11) In the fourth month, the foetus is stabilized and the mother puts on weight (*Śā* **4**, 20) It grows in flesh and blood in the fifth month and in strength and colour in the sixth, *at the expense of the mother who becomes* emaciated, weak and pale (*Śā* **4**, 21-22) In the seventh month there is an all-round development and in the eighth there is a continuous flow of

vitality to and from the mother (*Śā* 4, 23 24) It continues to grow by nourishment until delivery, which should occur in the ninth or tenth month (*Śā* 4, 25) Any factor which upsets the proper sequence leads to an abnormal period of gestation, or destruction of the foetus (*Śā* 4, 59)

The first stage of foetal development has been assumed differently by different experts in the discourse given in the *Caraka Samhita* (*Sā* 6, 21)

The child in the womb has its limbs folded, its head erect and its back towards the mother's abdomen (*Śā* 6, 22) Its heart is connected with the mother's heart through the umbilical cord and the placenta, the latter is flooded with blood by the pulsating arteries of the mother The mother's blood transmits nourishment, vitality, and complexion The skin pores of the foetus also absorb the nourishment (*Śa* 6, 23) The two minds (of the mother and the foetus) have an intimate psychical connection (*Sa* 4, 15/2) The foetus may be destroyed, deformed or may suffer psychic injuries due to physical and emotional disturbance of the mother (*Śa* 4, 15-30) Faulty diet and habits, as well as mental shocks, a comprehensive list of which is given in the text, also contribute to this end (*Śā* 8, 21)

Instructions are also given by Caraka for the proper care of the pregnant woman, these include specified diet, prophylactic treatment and maintenance of emotional harmony (*Śa* 8, 32/1) Such treatments ensure good health, vitality and a pliable womb for the mother, and a soft placenta at the time of delivery (*Śā* 8, 32)

The text describes in some detail the symptoms of recent and advanced pregnancy (*Śa* 2, 22, 4, 16), and the pre indications of male and female births (*Śā* 2, 24 25) Methods of ensuring the birth of male offspring (*Śā* 8, 11-19) are also indicated

The signs of imminent delivery (*Śa* 8, 36), the requirements of an well appointed maternity house (*Śa* 8, 33 35), methods of minimizing labour pains (*Śa* 8, 38-39), proper handling and help in delivery (*Śā* 8, 40-41), and post-natal care of the child (*Śa* 8, 42-45) and its mother (*Śa* 8, 48-49) are also described in detail

(*d*) Humoral Theory (Concept of the Origin of Diseases)

The well known humoral theory, which postulates the existence of three humors in the human body—named *vāyu* (or *vata*), *pitta* and *kapha*, is built upon the premise that apart from a few exceptions all human beings have a predominance of one of the three humors from the very moment of conception (*Sā* 7, 39) The few exceptions are equipoised, enjoying perfect health, the rest can be classified according to the continual predominance of a particular humor in their system The inherent imbalance makes them always susceptible to diseases (*Sā* 7, 40) The types can be diagnosed by their physical characteristics (*Vi* 8, 96-99) But diseases actually occur when

(*e*) *Vāyu* and Its Role in Human System and in Nature (*Sū.* **12**, 8)

According to Caraka *vāyu* is that which keeps the machine of the body at work. It is the impelling force for all bodily efforts, and sets in motion the sense organs and the mind; it regulates the body elements, maintains equilibrium in the body, stimulates digestion, eliminates harmful matter and waste products, and gives shape to the foetus. It manifests itself in five forms: *prāna, udāna, samāna, vyāna,* and *apāna.* Their seats in different parts of the body and their physiological effects are also specified (*Ci.* **28**, 4-9).

When activated in an abnormal state *vāyu* may create diseases of the body, cause mental depression, affect the sense organs, destroy or deform the foetus, or increase the period of gestation.

In nature *vāyu* serves as an envelope for the earth, supports combustion, causes the formation of clouds, the condensation and precipitation of water as rain, and gives rise to streams. It helps growth of plants, flowers, fruits and crops, and maintains the division of seasons.

Vāyu in an abnormal state in nature is identified with storms and winds, causing damage to matter and life.

The properties of *vāyu* has been described by Caraka as dry (*rukṣa*), cold (*śita*), light (*laghu*), subtle (*sūksma*), moving (*cala*), scattering everything in different directions (*viśada*) and rough (*khara*). *Vāyu* has been identified with the continuity of life (*Sū.* **1**, 59; **12**, 8).

(*f*) Memory and Dream

Caraka has enumerated eight causes of memory (*Śā.* **1**, 148-149):

(*a*) Impressions, similar and dissimilar; (*b*) co-ordination of mind; (*c*) practice; (*d*) knowledge; (*e*) recollection; (*f, g,* & *h*) repetition of sight, hearing, and perception

Dreams have been classified by Caraka into seven types, based on (*In.* **5**, 27-46):

(*a*) Visual impression; (*b*) auditory impression; (*c*) experience; (*d*) inner desires; (*e*) fancy; (*f*) premonition; (*g*) morbid humors.

An account of the different varieties of dreams arising from morbid humors has been given, particularly those foreboding death.

(*g*) Ethics in Caraka

Caraka advances a very catholic and commonsense view of *karma* and rebirth differing from those of other Indian philosophers. The laws of *karma* are not considered immutable by Caraka who allows a limited amount of freedom to human efforts in arresting the fruits of all ordinary non-moral actions. Only the effects of very good or bad moral actions cannot be thus modified or averted by human efforts. The fruits of all non-moral or ordinary actions can be averted by the exercise of human intelligence,

wisdom and well balanced conduct, and by the administration of proper medicine and the like Caraka therefore holds that right conduct (*sadvrtta*) can help in the *preservation of physical and mental health and in securing sense* control (*indriyavijaya*) (*Vi* **3**, 28 38, *Su* **8** 17)

Caraka recognizes that there are three primary desires serving as the springs or causes of all our actions These are desire for self preservation (*pranaisana*), *desire for wealth* (*dhanaisana*), *and a desire for a happy future* life (*paralokaisana*) (*Su* **11**, 3, 7, 8, 13)

IV PHYSIOLOGICAL PROCESSES

(a) Digestion and Metabolism

Production of heat in the body is said to be the basis of life process The life span, vital breath, vital essence body heat, muscular strength, energy, lustre, etc , all are dependent upon the production of heat inside the organism *When the body heat becomes abnormal, disease results, when it is suppressed* or dies out, there is an end of life (*Ci* **15** 3 4) In the *Caraka Samhita* the word *agni* has been used for body heat its literal meaning is fire This is related closely to metabolic processes (*Vi* **6** 12)

This production of body heat depends upon the intake of food Food nourishes the body elements, vital essence, strength, etc., but the nutrient action of food is a result of gastric digestion If the process of digestion is hampered, food fails to nourish (*Ci* **15** 5)

Ingested food and drink pass into the stomach and are broken up and *softened by the digestive fluid in the stomach* During this process, the food is transformed into a sweet, frothy mucus like fluid As the digestive process continues it becomes acidic and, issuing out of the stomach, excites the secretion of thin bile (*Ci* **15**, 8 10) Ultimately it is converted into assimilable nutri*tive fluid and also some waste products* Excretions of the body are formed from the waste products (*Su* **28**, 4/7) The process of digestion ends in the large intestines where the remnants are converted into lumps of stool (*Ci* **15**, 11)

The nutritive fluid formed is converted into blood, flesh, fat, bone marrow, semen, ligaments and clear fluid (serum ?), as well as the sensory faculties (*Su* **28**, 4/2) The body elements are replenished by the food and are able to maintain the body in a proper condition by gathering the necessary ingredients from food This replenishment and maintenance take place when the various metabolic processes are proceeding without interruption, and the *srotamsi* (movements of body fluids) are unimpeded in their proper channels The nutritive fluid then pervades the whole body (*Su* **28**, 3)

The body channels, constituting the means of passage of the nutritive fluids from food, feed the various body elements in the requisite measure

and with the required constituents (*Su* 28, 5/1) The requirements of the body according to size, condition and age determine the quantity of nutritive fluid formed from food, thus maintaining the balance of the body elements (*Sū* 28, 4/3 and 4/4)

From the waste products of digestion are formed sweat, urine and stools, the morbid forms of the three body humors, the excretions of the eyes, ears, nose, mouth, hair follicles and female parts, the hairs of the head, face and body, and the nails The quantities produced depend on the age, size and condition of the body (*Sū* 28, 4/1 and 4/4)

(*b*) MOVEMENT OF FLUIDS THROUGH CHANNELS OF THE HUMAN BODY

Caraka states that there are innumerable *srotāmsi* or fluid currents through numerous channels in the human body They serve to convey nutrients and healing matters where needed, and to carry away decaying and harmful products formed These *srotas* convey the products of the body elements—blood, flesh, fat, bone, marrow, nutritional juices, semen and life breath These body elements cannot develop or decay independently of the *srotas* (*Vi* 5, 4)

There is as much functional diversity of these channel systems as in the structural composition of the rest of the human body, but the most important among them are those which carry life breath, water, food, nutritive juices, blood, flesh, fat, bone matter, marrow, semen, urine, stool and sweat The three humors—*vata*, *pitta* and *kapha*—diffuse throughout the entire body with the help of all these channel systems The supersensory essences of man are independent of the channels, the entire sentient body is, in fact, both the vehicle and the field of their operation (*Vi* 5, 3 and 6)

The channels are normally in the form of elongated vessels, extensive ducts or convoluted tubes In dimension, they vary from large to very fine ones (*Vi* 5, 25) The various types found in the body are (*a*) *sira* or vein, (*b*) *dhamani* or artery, (*c*) *rasayanya* or ducts, (*d*) *nadi* or tube, (*e*) *pantha* or tract, (*f*) *mārga* or passage, (*g*) *sarīracchidra* or body orifice, (*h*) *samvrtāsamvrta* (vessel open at one end only), (*i*) *sthana* or container, (*j*) *aśaya* or bladder, (*k*) *niketa* or closed container Some of the channel systems are not visible to the naked eye (*Vi* 5, 9)

The *srotāmsi* have specified centres and areas of operation Such areas develop characteristic symptoms, if any of the *srotas* systems is vitiated or obstructed (*Vi* 5, 6) This obstruction is not limited to the stationary and mobile body channels of the specified area, but may spread to the other *srotas* systems If, however, any one of the three humors is affected, the entire body is also affected (*Vi* 5, 9)

In the heart are rooted the ten main channels that carry the vital essence through the whole length and breadth of the body These main channels

are either *dhamanis* which pulsate, or *srotamsi* which carry nutritive fluids or *sira* (*Su* 30, 8 and 12) Heart is regarded as the only seat of consciousness (*Śa* 7, 8 9), while *prana* (the vital current) and all the senses emanate from the head (*Si* 9, 4)

The heart is the source of the life breath *srotas*, the bronchial area is the source of the water *srotas*, the region of the stomach, particularly the left side, is the source of the food *srotas*, the heart with its ten main channels is the source of the *srotas* of nutrition, the liver and spleen are the source of the blood *srotas*, the muscles and skin are the source of the flesh *srotas*, the kidneys and the omentum are the source of the fat *srotas*, the body fat is the source of the bone matter *srotas*, the bones and joints of the marrow *srotas*, the testes and phallus, of the semen *srotas*, the kidneys and the bladder of the urine *srotas*, the colon and the rectum, of the stool *srotas* and the fat and hair follicles, of the sweat *srotas* (*Vi* 5, 8)

When the *srotamsi* are in an abnormal state there is an increased or decreased flow of the fluids they carry the channels also become knotted and there is diversion of flow to abnormal channels The treatment of such conditions consists of treating the various parts of the body which have been recognized as the specific centres of the various *srotamsi* (*Vi* 5, 24, 26 28)

(*c*) Tastes

The taste is an intrinsic property of material substances There are only six basic tastes—sweet acid saline pungent, bitter and astringent (*Su* 26, 9) These six categories of taste according to Caraka, emerge in different substances from the collocation in unequal proportions (preponderance or paucity) of the five *mahabhutas* or primal elements The same view is held regarding the origin of colour (*Su* 26 40/2)

The sensation, which is immediately perceived on contact of the substance proper with the tongue, is called taste Any sensation subsequent thereto is called the after taste or latent taste The physiological action of all substances depends upon the taste and also its after taste, if any (*Su* 26 28 43)

All tastes are conveyed through the medium of water which according to Caraka, sustains all animal and plant life (*Su* 26, 30) But water has a taste which is imperceptible Palatability, or otherwise, of a substance is a matter of personal idiosyncracy while its beneficial or harmful action depends on factors, like its composition purity and the time and clime of its use (*Su* 26 9)

Single or pure tastes are to be found in many substances, but they occur mostly in combinations For example, alkaline substances possess a complex taste, with saline and pungent tastes predominating By the presence of two three, four, five or all six tastes in the same substance, fifty seven mixed tastes may arise, which with the six simple tastes make sixty three different tastes (*Su* 26, 9 and 24)

In common with the bodily humors, tastes have the inherent properties of heaviness, lightness, coldness, heat, oiliness and dryness. (*Sū.* 26, 9). A knowledge of the tastes of different substances is therefore essential in the treatment of diseases which are caused by the abnormalities of the body humors (*Sū.* 26, 27). In fact, each and every substance, due to the inherent property of taste, may be put to medicinal use, with due consideration to the appropriate time of its application, its quantity, purity, combination with other substances, physical properties and dosage (*Sū.* 26, 12, 29).

The text describes in detail the beneficial physiological actions of the substances belonging to the basic taste groups, and the pathological symptoms produced by their exclusive indulgence or over-indulgence. Thus, with the taste as guide, all edible and medicinal substances, taken in the right measure and manner, are invariably beneficial (*Sū.* 26, 43-44).

V. HEALTH AND LONGEVITY

(*a*) Personal Hygiene

Caraka enjoins constant vigilance and a regular daily and seasonal routine of prophylactic measures for the maintenance of health and vigour (*Sū.* 5, 103). The use of collyrium at night and of eye-salve and eye-drops after exposure to glare are recommended for good eyesight. Smoking of pipes and cigars, containing medicinal herbs, at regular intervals everyday is said to prevent neuralgic pains and increase mental alertness (*Sū.* 5, 15-27), but many complications and even permanent injury may be caused by uncontrolled smoking, especially in an exhausted or intoxicated state (*Sū* 5, 38-45).

The application of medicated oil to the nostrils at prescribed times retards senility and maintains the acuteness of sight, smell and hearing (*Sū.* 5, 48-70).

Brushing the teeth twice a day with partly crushed green twigs of certain plants, and scraping the tongue with shaped metallic scrapers, ensure strong teeth, sweet breath and a good appetite. Medicated gargles keep the facial muscles young, sharpen taste, increase appetite, and prevent dental decay (*Sū.* 5, 71-80).

Daily massage of the scalp and hair with approved vegetable oils prevents insomnia, baldness, grey hairs and sagging of the face muscles (*Sū.* 5, 81-83).

Draining the ear-passage with oil prevents deafness and other affections of the ear (*Sū.* 5, 84).

Daily massage of the body prevents excessive sweating, removes offensive body-odour and gives suppleness to muscles and tendons (*Sū.* 5, 90-93). Massaging with oils acts as a tonic to the skin, induces tolerance to physical hardship, makes the contours of the body firm and the skin glossy (*Sū.* 5, 84-86).

Bathing promotes vitality, physical stamina, longevity and removes fatigue (*Su* 5, 94)

The feet and private parts are to be kept scrupulously clean, and the hair, beard and nails regularly trimmed (*Su* 5, 98)

The use of clean apparel, foot wear and umbrellas promotes mental as well as physical comfort, and ensures good health (*Su* 5, 95, 100 101)

Regulated physical exercise aids digestion and increases capacity for work and physical strength, but overexercise or excessive physical work, indicated by an increased rate of respiration and a feeling of oppression in the cardiac region, causes debility and wasting diseases (*Su* 7, 31 35)

In order to maintain good health one should not unnecessarily or unduly suppress the natural urges and body functions, he should not sleep in a crooked position, nor on a narrow and uneven bed, he should not ride on an uncomfortable saddle or carriage seat he should not gaze directly at the sun or strong lights, nor expose himself to strong sunlight, storm or snow fall for extended periods, nor warm himself directly before or over a fire, he should not indulge excessively in alcoholic drinks, heavy meals, or sexual acts, nor mate with a diseased or unfit partner, nor take part in unnatural or improper sexual relations he should avoid keeping late hours, taking a cold bath or a cold drink in a fatigued condition, and using soiled clothes after a bath (*Sū* 8, 19 22)

The mental impulses of greed, fear, anger, excessive melancholy, vanity, hatred, harsh speech and evil thoughts are as injurious to the body as to the mind (*Su* 7, 26 28)

All harmful physical and mental habits can be overcome gradually by proper training or by personal effort (*Su* 7, 36 38)

Special measures are recommended for the maintenance of health during seasonal changes Sudation, sunbath, warm apartments, thick and protective dress and bedding, and rich food are recommended when the cold season sets in (*Su* 6, 9 21) Physical exercise, lightly cooked meats and light alcoholic beverages are prescribed for spring time (*Su* 6, 24 26) Rich food, alcohol and hard exercise should be avoided in summer In the hottest days one should not venture out in the noon time heat, but take rest by sleeping during the day in order to compensate for keeping late hours at night (*Su* 7, 30) Thrice a year at prescribed seasons, the body should be cleansed of all accumulated waste matter by sudation, steam baths, emesis, purgative drugs, enemas, and douches (*Su* 7, 47)

(*b*) Effects of Environment on Health

Caraka treats bodily health not only as a personal problem, but also in its relation to heredity (*Śa* 3, 3 17), geographical environment, climate, water supply and seasonal variations (*Vi* 3, 6) The possibility of diseases due to such external factors alone was recognized (*Vi* 3, 4)

3

According to Caraka, though individual persons differ widely in physical health and vitality, they are collectively liable to devastating epidemics caused by external factors (*Vi.* **3**, 6-7).

Inhabitants of open spaces with scanty rainfall, and predominance of dry winds and of isolated forest areas are generally well-knit, hardy and healthy. Inhabitants of humid climates with abundant rainfall, marshy lands, deltas, and dense forests are generally delicate in physique and in health. Areas with a proper balance of dry and moist seasons and of open spaces and forests generally contribute to good health (*Ka.* **1**, 8; *Vi.* **3**, 7, 47).

It is stated that from the beginning of the summer to the end of the rainy season there is a gradual waning of strength in man (*Sū.* **6**, 6-7). The cold season increases appetite and digestive power, when, with proper nourishment, the bodily vigour reaches its highest peak (*Sū.* **6**, 8-9).

(*c*) Nutrition and Diet

Āhāratattva (*Sū.* **25**, 35, etc.) or dietetics forms an important and integral part of the *Caraka Samhitā* (*Sū.* Chap. 5, 6, 25, 26, 27; *Śā.* Chap. 6). Wholesome diet is stated to promote bodily growth and health; unwholesome food is the most important cause of diseases (*Sū.* **25**, 31). The importance of a proper diet in health and sickness is repeatedly stressed upon (*Sū* Chap. 5, 6; *Śā.* Chap. 6). In the chapter on digestion it is asserted that the life-process itself depends upon the production of body-heat, derived from the food taken (*Ci.* **15**, 3-5).

A direct relationship is said to exist between the tastes of substances and their physiological actions. No distinction can be drawn between foods and drugs, as both possess taste and nutritive value, and exert specific action on the body.

Edible and potable substances are classified into cereals, legumes, potable water, salts, pot-herbs, fish, flesh, fruits, sugarcane derivatives, milk, ghee and other milk products, vegetable oils, lards, animal fats, and alcoholic beverages (*Sū.* **25**, 38). The most nutritive and the most harmful in each class are listed (*Sū.* **25**, 38-39). Eggs, blood and semen of various creatures are also stated to have nutritive value, though their use is not recommended (*Śā.* **6**, 10).

The text mentions in detail the digestibility, nutritive value and medicinal action of several hundred different edible and potable substances of various classes (*Sū.* Chap. 27). It is pointed out that all such substances can gain in nutritive value or become harmful by combination with other items, by cooking or preparation, and according to quantity taken, palatability, appetite, bodily health, local climate, season, and eating habits (*Sū.* **26**, 87-89). A list of substances which are incompatible with each other, or unwholesome in particular seasons, is given (*Sū.* **26**, 84 *et seq.*).

Even light, easily digested and nutritious food should not be taken in excess of bodily requirements, or after the appetite has been satisfied Difficultly digestible food should not be taken habitually If ever used, the quantity should not exceed a fraction of a full meal (*Su* 5, 7 11) Rich spicy foods, fats, and alcoholic drinks are stated to be beneficial in the cold season, lightly cooked cereals and meats, salts and light *wines in spring* and autumn, and light gruels, vegetables, fruits and acidulated cold drinks in *summer* (*Sū* Chap 6)

According to their intrinsic properties different foods undergo metabolism into body elements of the same nature and inhibit the formation of those having opposite properties (*Su* 6 16) A properly planned diet, using various aggreeable and nourishing foods in rotation, regulates the body-elements (*Su* 6, 6 and 7)

(*d*) Rejuvenation

Revitalization therapy is a prominent feature of the *Caraka Samhitā* It is suggested that the body fluids are capable of being replenished and renewed by proper medication and that it is possible to achieve not only vitality and vigour but also greater resistance to disease, longevity without senile decay heightened memory and intelligence, and an improvement in bodily strength personal beauty and sense perceptions In fact, Caraka asserts that even in old age it is possible to regain youth and remain youthful for a very *long period* (*Ci* 1/1, 6-12)

The treatment for rejuvenation follows the fulfilment of three preliminary conditions namely, *the patient must start with a single-minded determination* and complete faith, he should undergo the treatment in a nursing home (the exact specifications and equipment of which are listed), he *should* remain under the constant supervision of his physician The season and weather for treatment must be properly selected (*Ci* 1/1, 17 23)

The body is then thoroughly cleansed by oil massage and sudation by various means A course of intestinal aperients like myrobolans rock salt and special spices is given for cleansing the intestines The diet is limited to light gruel and warm water (*Ci* 1/1, 25-27)

Many preparations are prescribed for the actual rejuvenation process The fruits, plants and herbs used for such prescriptions must be collected from Himalayan forests in their proper seasons and in perfect and flawless state Pure honey, ghee, salts and minerals are also mentioned as ingredients in many prescriptions Special diets are described in all cases (*Ci* Chap 1)

Claims have been made that it is possible by a special course of rejuvenation to transform entirely an aged and diseased body into a fresh and youthful one in the course of six months (*Ci* 1/4, 7)

(e) Public Sanitation

Some advice regarding public sanitation is found in the *Caraka Saṃhitā.* People are urged to avoid all filthy matters like offal, broken fragments of cooking vessels, and waters of public baths (*Sū.* 8, 18/6). Blowing the nose in a crowd or committing nuisance on a public road is forbidden. Adultery, association with prostitutes, gambling, drunkenness, crude habits of eating, dirty or inadequate dress, and picking the nose, or sneezing, are considered unhealthy practices to be avoided by those aspiring after a clean and meritorious life (*Sū.* 8, 19-25).

Contaminated water is recognized to be a major cause of ill health and epidemics (*Vi.* 3, 7), and the use of only clean and pure water from natural sources is recommended at various places of the text (*Sū.* 6, 47, etc.).

VI. PHYSICIANS IN CARAKA

The *Caraka Samhitā* lays down an elaborate code regarding the training, duties, privileges and social status of physicians.

Any person could aspire to be a physician, provided he had a clear idea of the duties and obligations pertaining to the profession. Good health, capacity for sustained effort and single-minded devotion to the science were considered as essential qualifications for the student of medicine. An austere and celibate life was enjoined for the disciple during his training period (*Vi.* 8, 3, 7, 13).

The student was free to choose his own branch of the science. The choice of a teacher also rested with him. But it was for the teacher to assess the merit of the candidate from his appearance, voice, acuteness of sensory perceptions, personality, intellectual capacity and mental outlook before selecting him as a disciple. Instructions were given free. The disciple lived with the preceptor like a son, slave or supplicant till the training was completed and had to follow a rigid time-table (*Vi.* 8, 3, 4, 7, 8, 13).

Aspiration for success, wealth and fame was considered normal on the part of an intending physician; but obligations to his future patients and to *the society were repeatedly impressed upon by the preceptor.* Desertion of, or injury to, patients under any circumstances was strictly forbidden (*Vi* 8, 13).

A physician should remain, in a sense, a student all his life, gaining experience, knowledge and understanding. Great stress has been laid on periodic discussions and debates with other physicians in conferences and in private (*Vi.* 8, 13, 20). *Theoretical knowledge, clarity of reasoning,* wide practical experience, and personal skill have been described as the four valued qualifications of the physician (*Vi*, 9, 6). He is expected to lead a disciplined and unostentatious life, to be pleasant in his manners, and to be considerate and

gentle in speech (*Vi* 8 13) Friendship towards all, compassion for the ailing, devotion to professional duties and a philosophical attitude to cases with fatal endings—these have been defined as the four corner stones of medical practice (*Su* 9, 26) Caraka advises that the physicians, while treating diseases, should also observe the *instructions of the Atharvaveda,* which include *svastyayana* (propitiatory rites), *bali* (offerings), *mangala homa* (auspicious oblations), *niyama* (penances), *prayaścitta* (purificatory rites), *upavasa* (fasting) and *mantra* (incantations), as also the use of *mani* (gems) in amulets (*Su* 30, 21, 26, 70, *Ci* 1, 3)

According to Caraka a physician is not expected to treat a person hated by the king or by the public (*Vi* 8, 13), or a habitually vicious or dishonourable person (*Vi* 3, 45) *He is also not expected to treat patients suffering from* incurable maladies (*Sū* 10, 8)

The physician must not enter a private house without previous permission or proper introduction, nor attend a woman in the absence of her husband or guardian He must not also say or do anything which might shock the patient or the relations and friends of the patient He must not divulge any information about the patient and his household (*Vi* 8, 13)

The physician, according to Caraka, should be held in high respect both by the king and the public (*Su* 9, 19) The practice of medicine by unqualified persons or *self styled physicians has been strongly condemned (Sū 29, 12)*

The physician is expected to maintain his own nursing home and dispensary, prepare medicinal preparations from raw materials, and arrange for the services of nurses and qualified attendants (*Sū* Chap 15)

VII DIAGNOSIS OF DISEASES

The Samhitā gives directions for the diagnosis of a large number of diseases from a consideration of their etiology symptoms and prognosis It also *contains an exposition of the general theory* and methods of diagnosis

According to Caraka there are three means open to the physician for ascertaining the nature of any *sickness* They are (*i*) *theoretical knowledge* of the possible causes and symptoms of all known diseases, (*ii*) meticulous observation of the patient s symptoms and complaints, (*iii*) inferences based on previous experience In the absence of one or more of the three aids to diagnosis, or with their fragmentary or incorrect knowledge, the physician cannot come to a true conclusion (*Vi* 4 3 5)

At another place Caraka again states that the three methods for the ascertainment of the nature of diseases are *nidāna* (cause and effect relation *pūrvarūpa* (invariable prognostication), and *upaśaya* and *anupaśaya* (concomitant variation) (*Vi* 1, 7, 8 10)

It is essential for the physician to have an exhaustive theoretical know

ledge of the nature of all diseases—their specific sources, exciting factors, preliminary indications, bodily symptoms, local pains caused by them, possible complications and aggravations, degrees of severity, periods of duration, and indications of recovery and convalescence By interrogation and by the application of his own trained senses the physician should conduct a detailed examination of the patient's appearance, voice, abnormalities, intestinal and other internal sounds, blood and other body fluids, and bodily excretions If necessary, he should draw a sample of the patient's blood and test it by offering it to a dog or a crow He should also gather all possible information regarding the digestion, bowel movement, vitality, acuteness of sensory perceptions, clarity of mind, memory, psychic condition, irregularities of behaviour, dreams, aversions, hankerings and complaints of the patient Latent symptoms, if any, should be tested by provocative medication Only then he can make a diagnosis of the ailment, determine the expectation of recovery or imminence of death, and decide upon a course of treatment (*Vi* 4, 6 9) It has been emphasized that fever is the first symptom of all diseases (*Ni* 1, 16)

Diseases can be mild or severe The preliminary symptoms are often the same In fact, the behaviour, bodily appearance and apparent vitality of the patient may sometimes give false indications *It is easy for the* inexperienced physician to jump to conclusions on insufficient or misleading evidence A mild palliative prescribed for a disease which is destined to become serious, or a strong medicine for a mild variety, may cause considerable injury to the patient, even death may result Mere identification of a disease does not mean its diagnosis, it is absolutely necessary to foresee its possible course and severity (*Vi* 7, 2, 3, 5, 7)

Some diseases are incurable and are known as such by their peculiar symptoms, such symptoms often indicate the period the patient will survive (*Ni* 1, 6, *In* Chap 6 & 7) Some diseases are secondary, being caused by others occurring earlier They may occur after the original malady subsides, or may run simultaneously with the later phase of the primary disease (*Ni* 8, 20 23)

In diagnosis the patient's personal history and background are of great importance Residents of different countries are used to different diets, have different habits, and differ in physical fitness and mental inclinations Hence, what is wholesome and normal for one type of people may have opposite effects on another The liability to diseases of a person depends upon his place of birth, normal place of residence and accidental presence in a foreign country (*Vi* 8, 93)

The patient's nature, abnormalities, vitality, physical build, bodily proportions, physical equilibrium, psychic condition, capacity for food, capacity for physical exercise, and age — all are important factors in diagnosis (*Vi* 8, 94)

If the body elements are individually healthy and collectively in harmony with each other, the patient is highly resistant to diseases and specially to diseases of the severe type (*Vi* 8, 111) He is also not easily affected by senile decay The opposite is true for people with unhealthy and unbalanced body elements (*Vi* 8, 112) In addition to these extreme cases, there are also intermediate types (*Vi* 8 113)

VIII METHODS OF TREATMENT, INCLUDING SURGERY

Different types of methods for the treatment of diseases have been described by Caraka, as follows

(1) *Oral medication* by single or compounded medicinal substances, sometimes more than fifty in a prescription are listed Special emphasis is laid on diet, considered an essential part of the treatment (*Su* Chap 5, 6, 25, 26, 27) Purgation and/or emesis is frequently recommended for cleansing the system of accumulated waste materials Apart from drugs, purging is also effected by enemas (*Ci* Chap 7, 13, etc , *Si* Chap 9 12)

(2) (*a*) *Eye-drops and salves* for eye diseases and loss of visual power (*Su.* 5, 18, etc)
(*b*) *Gargles* for diseases of the mouth, throat, teeth and gums (*Su* 5, 78, 79, etc)
(*c*) *Medicinal cigars and smoking mixtures* for affections of the head, nose, throat and bronchial tract (*Su* 5, 24, etc)
(*d*) *Nasal medication in the form of powders, ointments, or inhaled fumes* for psychic disorders, fainting fits, and affections of the nose (*Sū* 5, 13 14, etc) In epilepsy and insanity, herbs and animal substances are burnt for inhalation (*Ci* Chap 10)

(3) *Liquid unguents, creams, salves, ointments lotions and medicated oils* for the skin and other parts (*Ci* Chap 6, 7, etc)

(4) *Suppositories, tampons, and soaked cotton swabs* for ear passages and lower orifices of the body (*Ci* Chap 7, 8, etc)

(5) *Enemas* of nutritive and healing fluid mixtures for absorption in the rectal and vaginal passages in wasting diseases, debility and fractures (*Si* Chap 3, 5, 12, etc)

(6) *Douches* for flushing the rectal, vaginal and urethral passages and for relieving congestion (*Su* Chap 9, 10, etc) Douche cans, tubes, and catheters, made of gold, silver or alloys, were used for this purpose (*Su* 1, 44, 45, etc)

(7) *Sweating* the body surface by sun bath, heated air, steam, or contact with hot surfaces for cleansing the system of absorbed impurities, sudation by steaming decoctions of medicinal

substances, vapours, fomentation, poultices, solid lumps of medicinal matter and hot immersion bath (*Sū* Chap 14)

(8) *Bandages, splints and tourniquets* in fractures and surgical conditions (*Si* Chap 9) *Ligatures* for poisonous bites and for surgical operations (*Ci* Chap 23, 24, etc)

(9) *Bleeding* by incision, or by the application of leeches, in poisonous bites, epilepsy, rheumatism, etc (*Ci* Chap 10, 23, etc)

(10) *Excision, incision, puncturing, removal of the skin layer, cauterization, surgical removal, rupturing, probing and other surgical methods* (*Su* **11**, 55), the removal of a dead foetus (*Śa* **8**, 30, *et seq*) and an operation for peritonitis (*Ci* **13**, 185 *et seq*) have been described in some detail, scalpels, metallic probes, etc were used in such processes (*Si* Chap 9) The use of live ants of the big variety to grip together and hold tight the skin flaps after an internal operation has been described (*Ci* **13** 190 *et seq*) The ants were killed by hot water and cut in two, with their gripping jaws left behind

(11) *Psychiatric methods* for curing mental conditions (*Vi* Chap 6)

In the treatment of all diseases the physician should take care to perform the following preparatory processes purification (purgation, emesis, etc), tranquilization (use of sedatives) of the system, and avoidance of all causative factors (*Vi* **8**, 30)

IX POISONS

The *Caraka Samhita* includes a detailed discussion of the various categories of poisons and the means by which they enter the human system, their symptoms, effects and antidotes are also described

The venoms secreted by animals, reptiles, aquatic creatures and insects are conveyed by their bites They generally act very rapidly causing burning sensation, inflammation, swelling, drowsiness, fainting and diarrhoea The symptoms are more pronounced in the lower extremities of the body (*Ci* **10**, 15, 17, 23)

Poisons from vegetable roots and bulbs, mineral poisons and artificially prepared poisons enter the human body through foods, beverages, water, smoke, vapours, skin applications, or by mere contact (*Ci* **23**, 106 122) Such poisons act slowly and cause fever, spasms, throat contraction, muscular rigidity, partial paralysis, frothy salivation and vomiting The symptoms are more pronounced in the upper parts of the body (*Ci* **23**, 16-17)

The toxic effects are liable to be mistaken for diseases (*Ci* **23**, 18) They vitiate the blood and other body elements progressively, eight distinct stages with increasingly graver symptoms have been noted (*Ci* **23**, 14) Death may be caused by poisoning in the absence of proper treatment (*Ci* **23**, 31)

Treatment for poisoning consists in the immediate application of stimulants to protect the heart, followed by *incision, tourniquets, ligatures, suction,* blood letting, application of freshly cut meat, oral medicines and counter-*poisons*, according to the nature of the toxic substance (*Ci* **23,** 35 50) For poisoning through food, drinks, etc , the immediate treatment is emesis (*Ci* **23,** 122)

A description of the distinctive symptoms of bites by ten types of snakes (cobra, viper, etc), mosquitoes, poisonous flies, hornets spiders, scorpions lizards, rats, crabs, toads (*Ci* **23,** 124 158), dogs and some predatory animals (*Ci* **23,** 175, 220 232) is found in the text with specific antidotes for individual cases

The medicinal value of venoms and vegetable poisons were known in Caraka's time *They are described to have antagonistic effects in the presence* of each other (*Ci* **23,** 17) A significant passage states that even deadly poisons can be converted into excellent medicines by the right method of application (*Sū* **1,** 126)

Fumigation from vegetable and animal substances has been described as an antidote for most poisons (*Ci* **23,** 99) The insecticidal and vermicidal action of fumigation were also recognized and several recipes given for the purpose (*Ci* **23,** 98 100)

X PHYSICOCHEMICAL PROCESSES

Many of the common laboratory processes known today are found in the *Caraka Samhita* They occur in various passages which give instructions for compounding medicinal preparations (*Ci* Chap 1, 2, 15, etc) A list of terms for such processes is given in Table 17

Actual weights of the various ingredients of prescriptions are given in many cases, volumes are given in some instances The *tula* (balance) was used for weighing, and *manabhandas* (measuring vessels) for measuring liquids (*Su* **15,** 7) A list of the apparatus, mentioned in the various processes, is given in Table 16

Descriptions of the following processes are given in some detail

(1) A flame test for food poisons (possibly copper salts), where the flame shows a colour like the feathers of a peacock (*Ci* **23,** 109)

(2) A process of destructive distillation (*Ci* **15** 174)

(3) A process for the separation of the volatile components of a mixture, using distillation and air condensation (*Ci* **1/2,** 14)

(4) A process for continuous extraction of the fatty matter present in a plant product by repeated distillation with a volatile oil, followed by its condensation (*Vi* **7,** 22)

For the purpose of heating, wood and the dried cakes of various animal dungs were used according to the temperature required (*Ci* Chap 1, 2, 15, etc)

The mechanical processes mentioned are listed in Table 18

XI CLASSIFICATIONS

Vibhagavidya (*Vi* **4**, 4), or the theory of classification, is a feature of the *Caraka Samhita*

Many substances and phenomena are divided into rational groups

(1) The days of the *Samvatsara* (solar year) are divided into

(*a*) *Udakayana* (period of absorption of moisture)

(*b*) *Daksinayana* or *Visarga* (period of liberation of moisture)

Each of these periods is sub divided into three seasons (*Śu* **6**, 4)

(2) *Deśa* (habitable land) is classified according to topography, rainfall and vegetation into

(*a*) *Jangala* (dry grass lands)

(*b*) *Anupa* (wet lands)

(*c*) *Sadhārana* (intermediate types) (*Ka* **1**, 8)

(3) *Prāni* (living creatures) are classified according to their manner of birth as

(*i*) *Jarayuja* (born of womb)

(*ii*) *Andaja* (born of eggs)

(*iii*) *Svedaja* (born of heat and moisture)

(*iv*) *Udbhidija* (born of seeds) (*Śā* **3**, 16)

They are also classified in different contexts as

(*a*) *Krmi* (parasites found in living creatures) (*Sū* **19**, 4 9)

(*b*) *Kīta* (wingless insects) (*Sū* **27**, 213)

(*c*) *Patanga* (flying insects) (*Śa* **8**, 59)

(*d*) *Ekaśapha* (solidungulate animals) (*Sū* **27**, 211)

(*e*) *Dviśapha* (cloven footed animals) (*Ci* **17**, 118)

(*f*) *Mrga* (herbivorous animals) (*Sū* **13**, 11)

(*g*) *Kravyada* (carnivorous animals) (*Su* **22**, 27)

(*h*) *Śvapada* (dangerous beasts of prey) (*Śa* **8**, 59)

(*i*) *Vyala* (beasts of prey) (*Ci* **23**, 176)

(*j*) *Gomāyu* (creatures with poisonous fangs or stings) (*Ci* **23**, 10)

(*k*) *Sarpa* (snakes) (*Su* **27**, 213)

Creatures, whose flesh has got dietic value, have been divided into eight groups (*Su* chap 27) Table I gives a list of these groups

(4) *Udbhid* substances (plants or vegetation) are said to be of four types

(*i*) *Vanaspati* (bearing fruits only)

(*ii*) *Vanaspatya* (bearing fruits as well as flowers)

(iii) *Osadhi* (dying after bearing fruits)
(iv) *Virudha* (shrubs or herbs)

Udbhid substances (plants) also are divided in fifty groups according to the physiological actions of their decoctions (*Su* chap 4)

(a) *Jivaniya* (promoter of longevity)
(b) *Brmhaniya* (roborant and nourishing)
(c) *Lekhaniya* (reducing obesity and scarifying)
(d) *Bhedaniya* (promoter of excretion)
(e) *Sandhaniya* (promotes joining of fractured parts)
(f) *Dipaniya* promoter of digestion)
(g) *Balya* (promoter of strength)
(h) *Varnya* (brightens complexion)
(i) *Kanthya* (improves voice)
(j) *Hrdya* (cordial)
(k) *Trptighna* (removes sense of satiety)
(l) *Arśaghna* (curative of piles or haemorrhoids)
(m) *Kusthaghna* (curative of obstinate skin diseases)
(n) *Kandughna* (curative of pruritus)
(o) *Krmighna* (curative of worms)
(p) *Visaghna* (antidote to poisoning)
(q) *Stanyajanana* (promoter of lactation)
(r) *Stanyaśodhana* (purifier of breast milk)
(s) *Śukrajanana* (promoter of semen generation)
(t) *Śukraśodhana* (purifier of semen)
(u) *Snehopaga* (emollient)
(v) *Svedopaga* (diaphoretic)
(w) *Vamanopaga* (emetic)
(x) *Virecanopaga* (purgative)
(y) *Arusthapanopaga* (useful in corrective enemas)
(z) *Anuvasanopaga* (useful in enemas)
(aa) *Śirovirecanopaga* (prevents discharges from the nose)
(bb) *Chardinigrahana* (curative of nausea)
(cc) *Trsnanigrahana* (curative of morbid thirst)
(dd) *Hikkanigrahana* (curative of hiccup)
(ee) *Purisasamgrahaniya* (renders faecal matters consistent)
(ff) *Purisavirajaniya* (alters colour of faecal pigment)
(gg) *Mutrasamgrahaniya* (corrective of excessive urination)
(hh) *Mutravirajaniya* (curative of coloured urine)
(ii) *Mutravirecaniya* (diuretic)
(jj) *Kaśahara* (curative of cough)
(kk) *Śvasahara* (curative of laboured breathing)
(ll) *Svayathuhara* (curative of swelling and oedema)

(mm) *Jvarahara* (curative of fever)
(nn) *Śramahara* (curative of fatigue)
(oo) *Dahapraśamana* (curative of burning sensation)
(pp) *Śitapraśamana* (curative of the sensation of cold)
(qq) *Udardapraśamana* (curative of urticaria)
(rr) *Angamardapraśamana* (relieves pain in the limbs)
(ss) *Śūlapraśamana* (cures pain in the bowels)
(tt) *Sonitasthapana* (haemostatic)
(uu) *Vedanasthapana* (anodyne)
(vv) *Samjnasthapana* (resuscitative)
(ww) *Prajasthapana* (procreant, or curative of sterility)
(xx) *Vayahsthapana* (prevents ageing)

A mention of the classification of plants into male and female varieties is found in Caraka in the case of the *Kutaja* (*Holarrhena antidysentrica*) plant (*Ka* 5, 3, 5)

(5) *Dravya* (material substance) can be of three types in the context of their medicinal use

(i) *Jangama* (originating from mobile living bodies)
(ii) *Udbhid* (originating from plants)
(iii) *Parthiva* (of mineral origin) (*Su* 1, 68)

(i) *Jangama* substances used in medicine are *madhu* (honey), *gorasa* (milk), *pitta* (bile), *vasā* (fat), *majja* (bone marrow), *asrk* (blood), *amisa* (flesh), *mutra* (urine), *carma* (hide), *retas* (semen), *asthi* (bone), *snayu* (tendon or ligament), *śrnga* (horn), *nakha* (nail), *khura* (hoof), *keśa* (hair), *loma* (fur or body hair), *rocana* (a bright yellow deposit obtained from bile) (*Su* 1, 69)

(ii) *Udbhid* substances used in medicine are *mula* (root), *tvak* (bark), *sara* (pith), *niryasa* (resin or exudate), *nala* (hollow stem or stalk), *khara* (prickly or rough parts), *pallava* (sprout or shoot), *ksara* (alkaline matter), *ksira* (sap), *phala* (fruit), *puspa* (flower), *bhasma* (ash), *tailani* (expressed or essential oils), *kantaka* (thorn), *patrani* (leaves), *sunga* (sheath or calyx of bud), *kanda* (bulb), *praroha* (parasitic growth) (*Sū* 1, 73 74)

(iii) *Parthiva* substances used in medicine are *suvarna* (gold) *pañcaloha* (the five base metals, namely, silver, copper, iron, tin, lead), *mala* (the ores or corroded forms of the base metals), *sikata* (sand), *manahśila* (realgar), *mani* (gem or precious stone), *lavana* (salts), *gairika* (red ochre), *anjana* (antimony black), *ala* (yellow orpiment)

(6) Natural waters are classified according to their sources (Table 6)

(7) Diseases are classified as

(a) *Nijaśarīradosa* (inborn)

(b) *Āgantuja* (communicated from outside)

(c) *Manasa* (mental) (*Su* **II**, 45)

(8) Poisons are classified into

(a) *Jangama visa* (venom)

(b) *Sthavara visa* (vegetable poisons)

(c) *Garavisa* (artificially prepared or mineral poisons) (*Ci* Chap 23)

(9) *Krmi* (parasites of the body) are classified as

(a) *Sahaja* (symbiotic parasites)

(b) *Purisaja* (derived from faeces)

(c) *Kaphaja* (derived from mucus)

(d) *Śonitaja* (derived from the blood stream)

(e) *Malaja* (derived from the waste products of the body) (*Su* Chap 19)

TABLE 1

Living Creatures

Name in Caraka, reference, and synonyms (if any)	English and/or Latin name	Modern classification
PRASAH-VARGA (*Sū* **27**, 35, 36)	Creatures which grab and tear off their food	
1 AŚVA *Syn* HAYA *In* **12**, 83 TURAGA *Vi* **3** 36 TURANGA *Ci* **9**, 154 VĀJIN *Sū* **1**, 104	Horse (*Equus caballus*)	Mammal
2 AŚVATARA	Mule	,,
3 BABHRU	Large brown mongoose (*Herpestes mungo*)	,,
4 BHĀSA	Bearded vulture (*Gypatus barbatus*)	Bird
5 CĀSA	Blue jay (*Cyanocitta cristata*)	,,
6 DHUMIKĀ	Owlet (*Athene brama*)	,,
7 DVĪPIN	Panther (*Felis pardus*)	Mammal
8 GO *Syn* DHENU *Ci* **2/3**, 3 VṚṢA *Si* **12**, 18 ṚṢABHA *Ci* **10** 48 JĀRADRAVA *Si* **3**, 10	Cow (*Bos tauras*)	
9 GṚDHRA	Vulture (*Vulture monachus*)	Bird
10 JAMBUKA *Syn* ŚṚGĀLA *Ci* **10**, 41	Jackal (*Canis aureus*)	Mammal
11 KHARA	Ass (*Asinus equidae*)	,,
12 KULIṄGAKA	Sparrow hawk (*Ploceus bengalensis*)	Bird
13 KURARA	Osprey (*Pandion heliactus*)	,,
14 LOPĀKA	Fox (*Vulpus bengalensis*)	Mammal
15 MADHUHĀ	Honey buzzard (*Pernis apivorus*)	Bird
16 MĀRJĀRA *Syn* VIḌĀLA *Ci* **10**, 41	Cat (*Felis domesticus*)	Mammal
17 MUṢIKA *Syn* MUṢAKA *Vi* **3** 7/3 UNDURA *Ci* **23**, 9	Mouse (*Mus musculus*)	Mammal
18 ṚKṢA	Bear (*Melusus labiatus*)	,,
19 ŚAŚAGHNA	Golden eagle (*Aquilar chrysaetos*)	Bird
20 SIṂHA	Lion (*Felis leo*)	Mammal
21 ŚYENA	Hawk (*Accipiter gentilis*)	Bird
22. TARAKṢU	Hyena (*Hyaena striata*)	Mammal

TABLE I—(Contd.)

Name in Caraka, reference, and synonyms (if any)	English and/or Latin name	Modern classification
23 ULUKA	Indian horned owl (*Bubo bengalensis*)	Bird
24 UṢTRA *Syn* KARABHA Ci 13, 107	Camel (*Camelus dromedarius*)	Mammal
25 VĀNARA	Hanuman or Langur (*Semnopithecus entellus*) and other Indian monkeys (*Semnopithecus*)	,,
26 VĀNTADA *Syn* ŚVAN Ci 10, 41	Dog (*Canis familiaris*)	Mammal
27 VĀYASA *Syn* KĀKA Ci 23, 47	Crow (*Corvus splendens*)	Bird
28 VṚKA	Wolf (*Canis lupus*)	Mammal
29 VYĀGHRA *Syn* ŚĀRDŪLA Ci 23, 192	Tiger (*Felis tigris*)	,,
BHŪMIŚAYA-VARGA *Su* 27, 37, 38	Burrowing animals	
1 BHEKA *Syn* MAṆḌŪKA Ci 23, 9	Frog (*Rana*)	Amphibia
2 CILLATA	Water shrew (*Neomys fodiens*)	Mammal
3 CITRAPRASTHA KĀKULIMṚGA	Reticulated python (*Python reticulus*)	Reptile
4 GANḌAKA	Gecko lizard (*Ge konida*)	,,
5 GODHĀ	Iguana lizard (*Iguanidae*)	,,
6 KADALIN	Marmot (*Marmota*)	Mammal
7 KṚṢṆAKĀKULIMṚGA	Black python (*Python molurus*)	Reptile
8 KURCIKĀ	Hedge-hog (*Erinaceus europaeus*)	Mammal
9 NAKULA	Small mongoose (*Herpestes mungo*)	,,
10 ŚALLAKA	Porcupine (*Acanthion leucura*)	,,
11 ŚVĀVIT	Pangolin (*Manis pentadactyl*)	,,
12 ŚVETAKĀKULIMṚGA	White python (*Python molurus*)	Reptile
13 ŚYĀMAKĀKULIMṚGA	Dark grey python (*Python molurus*)	,,
ANUPA-VARGA *Su* 27 39	Creatures that dwell in marshy and wet lands	
1 CAMARA	Yak (*Poephagus grunniens*)	Mammal
2 GAJA *Syn* HASTIN *Su* 1, 102 KUÑJARA Ci 10, 40	Elephant (*Elaphus indicus*)	
3 GAVAYA	Goyal ox (*Bos frontalis*)	,,

TABLE I—(Contd.)

	Name in Caraka, reference, and synonyms (if any)	English and/or Latin name	Modern classification
4	KHAṄGA	Rhinoceros (*Rhinoceros unicornis*)	Mammal
5	MAHIṢA *Syn* RAKTĀKṢA *Ci* 4, 4	Buffalo (*Bos bubalus*)	„
6	NYAṄKU	Hog deer (*Cervus porcinus*)	„
7	RURU	Swamp deer (*Rucervus duvaucelli*)	„
8	ŚṚMARA	Indian wild boar (*Sus cristatus*)	„
9	VARĀHA	Pig (*Sus scrofa*)	„
	VĀRIŚA-VARGA *Sū* 27, 40	Creatures that live under water	
1	CULUKI	Porpoise (*Neomeris phocaenoides*)	Mammal
2	KARKAṬAKA *Syn* UCCIṬIṄGA *Ci* 23, 153	Crab (*Brachyura*)	Crustacea
3	KUMBHĪRA *Syn* NAKRA *Ci* 2/2, 10	Gharial crocodile (*Crocodylus porosus*)	Reptile
4	KŪRMA *Syn* KACCHAPA *Ci* 2/2, 10	Tortoise or turtle (*Chelonia*)	
5	MAKARA	Capricorn (Sea monster ?)	
6	MATSYA	Fish (*Pisces*)	Fish
7	ŚAṄKHA	Conch snail (*Gastropoda*)	Gastropoda
8	ŚIŚUMĀRA	Dolphin (*Dolphinus gangetica*)	Mammal
9	ŚUKTI	Pearl oyster (*Margaritifera*)	Mollusca
10	TIMIṄGILA	Whale (*Cetacea*)	Mammal
	AMBUCĀRI-VARGA *Sū* 27, 41-44	Creatures that live around, or on the surface of, water	
1	AMBUKUKKUṬĪ	Moor hen (*Gallinula chloropus*)	Bird
2	ĀRĀ	Avocet (*Recurvirostra avosetta*)	„
3	BALĀKĀ	Crane (*Ardea nivea*)	„
4	CAKRAVĀKA	Ruddy sheldrake (*Anas casarca*)	„
5	HAMSA *Syn* DHĀRTARĀṢṬRA *Sū* 27, 8[illegible]	Swan (*Cygnus olor*)	
6	KADAMBA	Grey leg goose (*Anser anser*)	„
7	KĀKATUṆḌAKA	River tern (*Sterna hirundo*)	„
8	KĀMAKĀLĪ	Tropic bird (*Phaethon rubricauda*)	„
9	KĀRAṆḌAVA	White-fronted goose (*Anser albifrons*)	
10	KEŚARIN	Curlew (*Oedicnemus crepitans*)	

TABLE I—(Contd)

	Name in Caraka, reference, and synonyms (if any)	English and/or Latin name	Modern classification
11	KRAUÑCA	Demoiselle crane (*Anthropoides virgo*)	Bird
12	MADGU	Small cormorant (*Phalacrocorus pygmaeus*)	„
13	MANITUNḌAKA	Oyster catcher (*Haematopus ostrolegus*)	„
14	MEGHARĀVA	Trumpeteer swan (*Cygnus buccinator*)	„
15	MṚNĀLAKANṬHA	Snake bird (*Plotus anginga*)	„
16	NANDĪMUKHA	Flamingo (*Phoenicopterus roseus*)	„
17	PĀKAHAṂSA	Mute swan (*Cygnus olor*)	„
18	PLAVA	Pelican (*Pelicanus onocrotalus*)	„
19	PUṢKARĀVYA	Lily trotter (*Ardea sibirica*)	„
20	PUṆḌARĪKĀKṢA	White-eyed pochard (*Nyroca ferina*)	„
21	RAKTAŚĪRṢAKA	Purple heron (*Ardea purpurea*)	
22	ROHIṆĪ	Common teal (*Anas crecca*)	„
23	SAHACĀRIN	Petrel (*Oceanitidae*)	„
24	ŚARARA	Skimmer bird (*Rhynchops*)	„
25	SĀRASA	Indian crane (*Megalornis grus*)	„
26	SUMUKHA	Mandarin duck (*Anas galericulata*)	„
27	UTKOṢA	Mallard (*Anas platyrhynchos*)	„
28	VAKA	Heron (*Ardea goliath*)	„
29	VĀTI	Little grebe (*Podiceps ruficollis*)	„
	JAṄGALA-VARGA *Su* **27**, 45, 46	Herbivorous animals living in grass-lands or forests	
1	CĀRUṢKA	Gazelle (*Gazelle bennetti*)	Mammal
2	ENA	Fawn deer (*Cervus rusa*)	„
3	GOKARNA	Cow-eared deer (*Antilope picta*)	„
4	HARIṆA	Black buck (*Antilope cervicapra*)	„
5	KĀLAPUCCHAKA *Syn* ASITAPUCCHAKA *Ci* **14**, 138	Black tailed deer (*Odocoilus* ?)	„
6	KOṬṬAKĀRAKA	Barking deer (*Cervus muntjac*)	Mammal
7	KṚṢNA	Musk deer (*Moschus moschiferus*)	„
8	KURANGA	Indian antelope (*Antilope cervicapra*)	„
9	MṚGAMĀTṚKĀ	Red deer ? (*Cervus elaphus*)	„
10	PṚSATA	Spotted deer (*Cervus axis*)	„
11	RĀMA	Kashmir red deer (*Cervus elaphus*)	„
12	SAMBHARA	Sambhar (*Cervus unicolor*)	„
13	ŚARABHA	Wapiti (*Cervus canadensis*) ?	„

TABLE I—(Contd.)

	Name in Caraka, reference, and synonyms (if any)	English and/or Latin name	Modern classification
14	ŚAŚA	Hare or rabbit (*Leporidae*)	Mammal
15	ŚVADAMṢṬṚ	Mouse deer (*Tregulus memmina*)	"
16	URANA	Oorial or wild sheep (*Ovis vignei*)	"
17	VARAPOTA	Small antelope (*Antilope cervicapra*)	"
	VIṢKIRA-VARGA *Su* **27, 47, 49**	Birds that scatter their food	Gallinaceous birds
1	AVAKARA *Syn* MAYŪRA *Su* 26, 84 ŚIKHIN *Su* 27, 58 BARHIN *Ci* 23, 182	Peacock or pea-fowl (*Pavo cristatus*)	Bird
2	CAKORA	Greek pheasant (*Perdix rufa*)	"
3	GIRIVARTAKA	Mountain quail (*Coturnix coturnix*)	"
4	GONARDA	Hill partridge (*Ardea sibirica*)	"
5	INDRĀBHA	Hedge sparrow (*Leucocerca aureola*)	"
6	KANKA	Heron (*Ardeidae*)	"
7	KAPIÑJALA	Black partridge (*Francolinus vulgaris*)	"
8	KRAKARA	Snipe (*Ardea virago*)	"
9	KUKKUBHA	Crow pheasant (*Coccyzus*)	"
10	KUKKUṬA *Syn* CARANĀYUDHA *Sū* 7, 11 DAKṢA *Si* 10, 11 TĀMRACŪḌA *Ci* 2/2, 28	Red-spur fowl (*Galloperdix spadicea*)	"
11	LAVA	Bustard quail (*Turnix suscitates*)	"
12	RAKTAVARTMAKA	Red jungle fowl (*Gallus ferrugineus*)	"
13	SĀRAPADA	Stork (*Ciconia boyciana*)	"
14	TITTIRI	Gray partridge (*Arborophila torqueola*)	"
15	UPACAKRA	Smaller Greek pheasant (*Perdix rufa*)	"
16	VARAPADA	Spoon-bill (*Platela leucorodia*)	"
17	VARTAKA	Indian button quail (*Turnix indica*)	"
18	VARTIKĀ	Bush quail (*Coturnix sylvatica*)	"
19	VARTIRAKA	Rain quail (*Coturnix coromandelica*)	"
	PRATUDA-VARGA *Sū* **27, 50-52**	Birds that peck and gobble their food	Bird
1	AṄGĀRACŪḌAKA	Black bulbul (*Microscelis psaroides*)	"
2	ATYUHA	Red-vented bulbul (*Molpastes haemorrhous*)	"
3	BABHRU VATAHĀ	Brown tree-pie (*Dendrocitta rufa*)	"
4	BHṚṄGARĀJA	Shrike (*Laniidae*)	"
5	CAṬAKA *Syn* KULIṄGA *Si* 12, 19.1	Tree sparrow (*Passer montanus*)	"

TABLE I—(Contd)

Name in Caraka, reference, and synonyms (if any)	English and/or Latin name	Modern classification
6 CIRAṬI	Babbler (*Timelidae*)	Bird
7 DINḌIMĀNAKA	Toucan (*Ramphistos pisciworous*)	„
8 DUNDUBHI	Grey hornbill (*Lophoceros birostris*)	„
9 GOPAPUTRA	Cow bird (*Molothrus*)	„
10 JAṬI	Indian hoopee (*Upupa indica*)	„
11 JĪVAJĪVAKA *Syn* JĪVAÑJĪVA *In* 12, 75	Peacock pheasant (*Chalcurus*)	„
12 KAIRĀTA	Red faced malkoha (*Pheanicophaes pyrrhocephalus*)	„
13 KALĀVIṄKA	House sparrow (*Passer domesticus*)	„
14 KANKU	Blossom headed parakeet (*Torquatus rosa*)	„
15 KAPOTA	Spotted pigeon (*Chalesphaps indica*)	„
16 KOKILA *Syn* VĀSANTAKA Ci 14 56	Indian koel (*Endynamis honorata*)	„
17 KOJAṢṬHI	Green bill coucal (*Centropus chlorhynchus*)	„
18 KULIṄGAKA	Weaver bird (sparrow hawk) (*Ploceus bengalensis*)	„
19 LAṬṬAŚĀKA	Paradise flycatcher (*Muscicapidae techitrea*)	„
20 LAṬVĀ	Pied flycatcher (*Muscicapidae atricapilla*)	„
21 LOHAPṚṢṬA	King fisher (*Alcedo ispida*)	„
22 PĀKKĀRA	Green barbet (*Thereiceryx zeylonicus*)	„
23 PĀNḌANAVIKA	Wood pigeon (*Columba palumbas*)	„
24 PĀRĀVATA	Pigeon (*Columba treron*)	„
25 PRIYĀTMAJA	Indian babbler (*Argya caudata*)	„
26 SĀRANGA	Ringneck parakeet (*Palaeonis torquatus*)	„
27 ŚĀRIKĀ	Mynah (*Turdus salica*)	„
28 ŚATAPATRA	Black wood pecker (*Picus martius*)	„
29 ŚUKA	Green parakeet (*Psittacula spengeli*)	„
30 YAṢṬHIKĀ	Sun bird (*Nectarinidae*)	„
KṚMI-VARGA *Si* 19, 4/9	Parasites inhabiting the living body	Nematoda
(*a*) *Living in the body excretions*		
1 YŪKĀ		
2 PIPĪLIKĀ		
(*b*) *Living in the blood*		
3 AUDUMBARA		
4 JANTUMĀTĀRA		

TABLE I—(Contd.)

Name in Caraka, reference, and synonyms (if any)	English and/or Latin name	Modern classification
5 KEŚADA		
6 LOMADA		
7 LOMADVĪPA		
8 SAURASA		
(c) *Living in the mucus and phlegm*		
9 ANTRADA		
10 CURU		
11 DARBHA-PUṢPA		
12 HRDAYADA		
13 MAHĀGUDA		
14 SAUGANDHIKA		
15 UDARAVEṢṬA		
(d) *Living in the faeces*		
16 KAKERUKA		
17 LELIHA		
18 MAKERUKA		
19 SAŚULAKA		
20 SAUSURADA		
GOMĀYU-VARGA *Ci* **23**, 9, 10	Creatures with poisonous fangs or stings	
1 ĀKHU	Rat (*Mus rattus*)	Mammal
2 ĀŚĪVIṢA	Snake (*Ophidia*)	Reptile
3 JALAUKAS	Leech (*Hirunidae*)	Chaetopoda
4 KRKAṆṬAKA	A type of scorpion (*Palamnaeus*)	Arachnida
5 KUḌYAKĪṬAKA	Wall lizard (*Lacerta muralis*)	Reptile
6 LUTĀ	Spider (*Lycosidae*)	Arachnida
7 MAṆḌŪKA	Frog (*Rana*)	Amphibia
8 MATSYA	Fish (*Pisces*)	Pisces
9 NAKULA	Mongoose (*Herpestes mungo*)	Mammal
10 PATAṄGA	Flying insects	Hymenoptera & Diptera
11 ŚĀRDŪLA	Tiger (*Felis tigris*)	Mammal
12 ŚATAPADĪ	Centipede (*Chilopoda*)	Arthropoda
13 SIṀHA	Lion (*Felis leo*)	Mammal
14 SIṀHAGIKĀ MAKṢIKĀ	Hornet or wasp (*Vespa*)	Hymenoptera

TABLE I—(Contd)

	Name in Caraka reference and *synonyms* (if any)	English and/or Latin name	Modern classification
15	ŚVAN	Dog (*Canis familiaris*)	Mammal
16	TARAKṢU	Hyena (*Hyaena striatus*)	
17	VIŚVAMBHARA	Scorpion (*Palamnaeus*)	Arachnida
	***SARPA VARGA** Su 27 213*	*Snakes (Ophidia)*	*Reptiles*
	SARPA *Syn* AHI *Ci* 10 31 URAGA *Ci* 27 31 ĀŚĪVIṢA *Ci* 13 9		
1	BHUJAGAPATI *Ci* 23 99	King cobra (*Naja bungarus*)	
2	DARVIKARA SARPA *Ci* 23 124	Viper (*Bitis echis*)	
3	GODHERAKA SARPA *Ci* 23 134	Hybrid of the snake and the iguana (?)	
4	GONASA-SARPA *Ci* 23 136	?	
5	KṚṢNASARPA *Ci* 23 124	A kind of poisonous snake	
6	MANDALI SARPA *Ci* 23 124	Indian cobra (*Naja tripudiana*)	
7	PATRAGA *Ci* 23 84	Tree snake (*Chrysopelia ornate*)	
8	RAJIMAN SARPA *Ci* 23 124	Striped snake with spots on its body	
9	TAKSAKA *Ci* 23 195	*Trimeresurus gramineus* ?	
	UNCLASSIFIED		
1	AJA *Su* 2 93 *Syn* BASTA *Sa* 25 39 CHĀGA *Ci* 23 77	Goat (*Capra hircus*)	Mammal
2	AVI *Syn* ĀVIKA *Su* 27 223 MEṢA *Ci* 17 116 URABHRA *Su* 6 43	Sheep (*Ovis*)	
3	DVIKAKUDA *C* 14 207	Two-humped camel (*Camelus bactrianus*)	
4	GANDUPADA *Ci* 8 151	Earthworm (*Lumbricidae*)	Annelida
5	JATUKA *C* 24 48	Lac insect (*Coccus lacca*)	Coccifera
6	MADHUMAKSIKA *Su* 5 43	Honey bee (*Apis indica*)	Hymenoptera
7	MADHU BHRAMARA *Su* 27 243	Black honey bee (*Apis dorsata*)	
8	MAKṢIKĀ *C* 20 29	House-fly (*Musca domestica*)	Diptera
9	MĀNUṢA *Su* 27 224	Man (*Homo sapiens*)	Mammal
10	MAŚAKA *In* 2 21	Mosquito (*Culicidae*)	Diptera
11	MATSYAKA *Śa* 8 19	Silver fish (*Lepisma saccharina*)	Thysanura
12	PIPĪLIKĀ *Ci* 23 187	Ant (*Formicoida*)	Hymenoptera
13	RĀJAHAMSA *Su* 12 18/1	Royal Chinese swan (*Cygnus cygnoides*)	Bird
14	VASTRAKṚMI *C* 23 100	Cloth worm (*Tinea*)	Lepidoptera
15	YŪKĀ *Vi* 7, 10	Body and head louse (*Pediculus*)	Anoplura

TABLE 2

Medicinal Substances of Animal Origin and their Uses

Name and synonyms in Caraka, with references	English equivalent	Mode of use or application	Medicinal uses in
1 AHI *Ci* 10, 51	Snake	Inhalation of the fumes when burnt	Epilepsy
2 AHI-PURĪṢA *Ci* 10, 51	Snake-dung	As above	Insanity
3 AJĀ-KṢĪRA *Ci* 5, 133, 8, 116, 11, 50, 19, 84, 25, 40, 29, 53, 133	Goat's milk	(*a*) External—in ointment (*b*) Internal—in diet (*c*) Internal—in medicated ghee (*d*) Internal—as ingredient of sweetened jelly	(*a*) Inflammation (*b*) Fever, enlarged spleen (*c*) Debility, haemothermia, etc (*d*) Blood dysentery
4 AJA-MĀMSA *Ci* 11, 83, 18, 44, *Ka* 1, 28 *Syn* CHĀGA-MĀMSA *Ci* 23, 67	Goat's flesh	(*a*) Local application for absorption of venoms (*b*) Internal—as soup in diet (*c*) Internal—as ingredient of ghee (*d*) Internal—the meat juice used in prescription	(*a*) Poisonous bites (*b*) Wasting diseases (*c*) *Spleen disease, pain in the* groin and pelvis (*d*) Anaemia, fistula, internal worms
5 AJA-MEDAS *Sū* 25, 38, *Ci* 11, 27	Goat's fat	Internal—in diet	Debility
6 AJĀ-MŪTRA *Sū* 1, 93, 100; *Ci* 30, 80	Urine of the she-goat	(*a*) External—for local massage (*b*) External—*in medicated oil for* local application (*c*) Internal—as drink	(*a*) Diseases of the spleen and stomach, *piles*, poisonous bites (*b*) Vaginal disorders (*c*) Jaundice, excessive bile secretion
7 AJA-RUDHIRA *Ci* 19, 74, 30, 101, *Si* 6, 82, 10, 41	Goat's blood	(*a*) As ingredient of enema (*b*) Internal—ingredient of liquid mixture	(*a*) Colic pain (*b*) Dysentery, vomiting, fainting, amenorrhoea
8 ĀKHU-MĀMSA *Ci* 23, *100*, 147, *26*, 175 *Syn* MUṢIKA-MĀMSA *Si* 12, 18/5	Flesh of mouse and rat	(*a*) As ingredient of enema (*b*) Internal—as ingredient of medicinal ghee	(*a*) Acute constipation, retention of urine (*b*) Diseases of the head
9 AŚVA KARĪṢA *Sū* 14, 26, 60, *Vi* 7, 22, *Ci* 14, 41, 17, 116, 130, 134	Horse-dung	(*a*) External—as fumigant (*b*) External—in poultices (*c*) Internal—in decoction (*d*) Internal—as *juice in mixture*	(*a*) As diaphoretic (*b*) & (*c*) Piles (*d*) Haemothermia, hiccup
10 AŚVĀ KṢĪRA *Ci* 11, 83	Mare's milk	As diet	Consumption

11 AVI ŚOṆITA *Ci* 30, 101, *Si* 10, 41 *Syn* MEṢA RAKTA *Ci* 19, 40	Sheep's blood	(a) As ingredient of rectal enema (b) Internal—in mixtures	(a) Haemorrhage (b) Amenorrhoea
12 AVI MŪTRA *Sū* 1, 93, 100, *Ci* 10 48, 26, 185	Sheep's urine	(a) External—in nasal medication (b) External—in eye application (c) Internal—in infusion	(a) Diseases of the head (b) Epilepsy, insanity (c) Imbalance of the humors
13 BALĀKĀ-ASTHI *Ci* 23 98	Bones of the crane	Burnt for fumigation	As vermicide and general disinfectant
14 BHUJAGAPATI ŚIRṢA *Ci* 23 99	Hood of the king cobra	Inhalation of the fumes when burnt	Oedema, toxicosis, poisonous bites
15 CAKORA *Ci* 2 1 46 3 190 23 110 *Si* 12, 19/1	Greek partridge	(a) External—extract of the flesh and marrow as ingredient of nutritive enema (b) Internal—as soup in diet	(a) Fever debility (b) Debility anaemia, fevers, female diseases
16 CAKORA AṆḌA *Sū* 27 85 *Ci* 11 25	Eggs of the Greek partridge	(a) Internal—in diet (b) Internal—as ingredient of mixture	(a) Seminal weakness (b) Profuse bleeding
17 CARAṆĀYUDHA MĀṀSA *Ci* 3 197	Fowl's flesh	Internal in diet	Fever haemorrhage
18 CĀSA *In* 12 76, *Ci* 8 150 17 118	The blue jay	(a) External—skin bones and feathers burnt for fumigation (b) Internal—in diet	(a) Congestion of the respiratory tract (b) Consumption
19 CAṬAKA-AṆḌA *Sū* 27 86	Sparrow's egg	Internal—in diet	Seminal weakness, cough, cardiac disorders
20 CAṬAKA-MĀṀSA *Sū* 27, 85, *Ci* 2/2, 10, 2/4, 6, *Si* 12, 18/8, 19/1	Flesh of the sparrow	(a) Ingredient of nutritive enema (b) Internal—in diet	(a) Rheumatism, debility, female diseases, etc (b) Sexual debility, general weakness
21 DAKṢA AṆḌA *Ci* 11, 25	Egg of the common fowl	Internal—in diet	Profuse bleeding
22. DAKṢA MALA *Ci* 25, 53 *Syn* KUKKUṬA-ŚAKṚT *Ci* 14, 54	Droppings of the common fowl	(a) External—local application (b) External—in ointment	(a) Suppurated swellings (b) Piles
23 DAKṢA MĀṀSA *Ci* 8, 66, 158, 11, 25 *Syn* KUKKUṬA MĀṀSA *Ci* 2/1, 48, 23, 67	Flesh of the common fowl	(a) External—local application for absorption of venom (b) Internal—in diet (c) Internal—the meat juice in diet	(a) Poisonous bites (b) Acute constipation, jaundice, dysentery, etc (c) Bleeding piles, sexual debility
24 DAKṢA-ŚOṆITA *Si* 10 41	Blood of the common fowl	Internal—in mixture	Amenorrhoea, fainting, diarrhoea, etc
25 DHĀRTARĀṢṬRA MĀṀSA *Sū* 27, 85	Flesh of the black-legged swan	Internal—as soup in diet	Seminal weakness, pulmonary weakness

TABLE 2

Medicinal Substances of Animal Origin and their Uses—(Contd.)

Name and synonyms in Caraka, with references	English equivalent	Mode of use or application	Medicinal uses in
26 DVIKAKUDA-RASA Ci **14**, 207	Meat-juice of the two-humped camel	Internal—in diet	Bleeding piles
27 DVIŚAPHA-CARMAN, KṢURA, ŚṚṄGA Ci **17**, 118	The skin, hooves and horns of cloven-footed animals	Inhalation of the fumes when burnt	Congestion of the respiratory tract
28 EKAŚAPHA-PAYAS Sū **27**, 221	Milk of solidungulate animals	Internal—in diet	General weakness
29. ENA-MĀṂSA Sū **5**, 5, **6**, 43, **13**, 11; **15**, 7, **22**, 25, **27**, 46, 271; Śā **8**, 24; Ci **3**, 191, **4**, 41; **19**, 50; **23**, 226, **24**, 138	Flesh of the antelope	Internal—as soup in diet	Fever, emaciation, debility, constipation, toxicosis, etc
30 ENA-ŚONITA Ci **19**, 74, **30**, 101; Si **6**, 82, **10**, 41	Blood of the antelope	(a) Ingredient of rectal enema (b) Internal—in mixture	(a) Colic pain (b) Amenorrhoea, nausea, fainting, collapse, etc
31 GAJA-ASTHI Ci **14**, 55	Elephant's bones	External—the powder as ingredient of ointment	Piles
32 GAJA-MĀṂSA Ci **2/2**, 29, **6**, 8, 154, **9**, 82, **14**, 56; **17**, 116, **18**, 20, **23**, 119	Elephant's flesh	Internal—in diet	Debility
33 GAJAMUKTIKA Ci **23**, 252	?	Worn as talisman	Antidote for poisonous bites
34 GAJA-ŚAKṚT Ci **17**, 116 *Syn* : KUÑJARA-PURĪṢA Ci **14**, 51	Elephant's dung	(a) Inhalation of the fumes when burnt (b) Internal—the aqueous extract taken with honey	(a) Epilepsy (b) Increase of phlegm or bile
35. GANḌUPADA Ci **8**, 151	Earth-worms	Internal—in diet, after frying in ghee	Consumption
36 GO-CARMAN Ci **9**, 49	Cow-hide	Internal—ashes, made ingredient of medicinal ghee	Insanity
37. GODHĀ-MĀṂSA Sū **2**, 33; **27**, 38, 70, Ci **7**, 88; **12**, 62; **14**, 126, **23**, 134, 186; Si **12**, 18/5	Flesh of the iguana	(a) External—local application for absorption of venom (b) Ingredient of nutritive enema (c) External—the meat juice as skin lotion (d) Internal—as soup in diet	(a) Poisonous bites (b) Major wounds, fractures, misperistalsis (c) Persistent skin diseases (d) Rheumatic conditions, debility

38	GO KṢĪRA *Sū* **1**, 106, *Śā* **8**, 24 *Syn* GO PAYAS *Ci* **2/1**, 35, *etc*, *Si* **10**, 41	Cow's milk	(*a*) External—in medicated oil (*b*) External—in ointment (*c*) Ingredient of nutritive enema (*d*) Internal—in diet (*e*) Internal—in mixture (*f*) Internal—in medicated ghee (*g*) Internal—in linctus (*h*) Internal—*ingredient of* candied sweets	(*a*) Burns, stiffness, etc (*b*) Dislocation, fractures, etc (*c*) Anaemia, amenorrhoea (*d*) *Debility, spleen diseases* (*e*) Jaundice, consumption, etc (*f*) Menstrual disorders, tendency to abortion (*g*) and (*h*) Heart diseases, excessive bile secretion, etc
39	GO MĀMSA *Su* **5** 11, **25**, 39, etc, *Ci* **6** 24, **8**, 185, *etc*	Flesh of the cow	(*a*) External—local application for absorption of venom (*b*) Internal—as soup in diet	(*a*) Poisonous bites (*b*) Rheumatic fevers, emaciation, consumption
40	GO MŪTRA *Su* **1** 93 **3** 13, etc *Vi* **8** 142, *Ci* **5** 178, etc, *Ka* **7**, 13, etc, *Si* **8** 18, etc	Urine of the cow	(*a*) External—as lotion (*b*) External—in ointment (*c*) Internal—as drink (*d*) Internal—in medicated ghee	(*a*) Skin diseases (*b*) Pruritus snake-bites, etc (*c*) Jaundice, leucoderma etc (*d*) Insanity epilepsy, etc
41	GO ŚAKṚT *Su* **14** 26 *Śa* **8** 10, *Ci* **4**, 68 **7** 57 **10** 12 **13** 130 **14** 41 **18** 91 **23** 46 48 **25**, 116	Cow-dung	(*a*) External—burnt for fumigation (*b*) External—ingredient of poultice (*c*) *Internal—in medicated ghee* (*d*) Internal—as aqueous extract with honey, etc	(*a*) As diaphoretic (*b*) Skin lesions (*c*) Piles (*d*) *Piles poisoning, oedema,* spleen diseases etc
42	GO SARPIS *Sū* **25**, 38, 40 *Ci* **2/2**, 11, **2/4**, 25	Cow s fat	Internal—in diet	Debility, rheumatism
43	GO ŚṚṄGA *Ci* **17** 79	Cow s horns	Inhalation of the fumes when burnt	Accumulation of phlegm
44	GO-SNĀYU *Ci* **17**, 79	Cow s sinews	Inhalation of the fumes when burnt	Congestion of the respiratory tract
45	GṚDHRA MĀMSA *Ci* **8** 150 **10**, 51	Vulture s flesh	(*a*) Inhalation of the burning fumes (*b*) Internal—in diet	(*a*) Insanity (*b*) Consumption
46	GṚDHRA PAKṢA *Ci* **10**, 51	Wings of the vulture	Inhalation of the burning fumes	Insanity
47	HAMSA-ANḌA *Ci* **2/1**, 49, *Si* **12**, 7, 19	Swan's egg	Ingredient of nutritive emema	Fever, weakness, senility, gradual loss of sense perceptions
48	HAMSA-MĀMSA *Sū* **13**, 83, **27**, 41, 66, *Ci* **2/1**, 41, 48, **2/2**, 10, **6**, 24, **8**, 158 **23**, 253, **26**, 175	Flesh of the swan	(*a*) Internal—in diet (*b*) Internal—the meat juice in diet (*c*) Internal—as ingredient of medicinal ghee	(*a*) Sallow complexion, emaciation (*b*) General weakness (*c*) Diseases of the head
49	HARINA MĀMSA *Śa* **8**, 24, *Ci* **3**, 191, **4**, 41, **14**, 201, **19**, 50, **23**, 226	Venison	Internal—in diet	Fever, haemorrhage, diarrhoea, habitual constipation, toxic condition

TABLE 2

Medicinal Substances of Animal Origin and their Uses—(Contd.)

Name and synonyms in Caraka, with references	English equivalent	Mode of use or application	Medicinal uses in
50 HASTINĪ MŪTRA *Su* 1, 102; *Ci* 7, 169	Urine of the she-elephant	(*a*) External—as lotion (*b*) Internal—as drink	(*a*) Leucoderma (*b*) Dermatosis, helminthiasis
51 HASTINĪ PAYAS *Śā*, 27, 223	Elephant's milk	Internal—in diet	Debility
52 JALAUKĀS *Ci* 14, 61, 21, 69, 119, 29 36 37	Leech	Local application of the living creatures for blood letting	Piles, vitiated blood, rheumatism of the joints
53 JAMBUKA MŪTRA, PITTA, KARĪṢA, NAKHA, CARMAN *Ci* 10, 51	Urine, bile, dung, nails and hide of the jackal	(*a*) Inhalation of the burning fumes (*b*) External—in making ointment	(*a*) Epilepsy (*b*) Insanity
54 JANḌAKA CARMAN *Ci* 17, 118	Animal hides	(*a*) Inhalation of the burning fumes (*b*) External—powdered ashes in ointment	(*a*) Hiccup (*b*) Congestion of phlegm
55 JATUKA VASĀ *Ci* 14, 48	Wax secreted by lac insects	(*a*) Inhalation of the burning fumes (*b*) External—local application	(*a*) & (*b*) Piles
56 JĪVAJĪVA ANḌA *Si* 12, 19/1	Egg of the peacock pheasant	Ingredient of nutritive enema	Debility, pectoral lesions, female diseases, recurrent fevers
57 KACCHAPA RASA *Ci* 19, 38	Meat juice of the small tortoise	Internal—in diet	Diarrhoea
58 KĀKA-MĀMSA *Ci* 8, 151	Crow's flesh	(*a*) Internal—in food (*b*) Internal—as meat juice in liquid mixture	(*a*) Emaciation, consumption (*b*) Poisonous bites
59 KĀKA PURĪṢA *Ci* 10, 51	Crow's droppings	Inhalation of the burning fumes	Epilepsy
60 KĀKA ŚONITA *Ci* 23, 182	Crows' blood	External—as local application	Poisonous bites
61 KĀLAPUCCHAKA MĀMSA *Sū* 15, 7, 27, 46, *Śa* 8, 24, *Ci* 3, 191, 4, 41, 19, 50	Flesh of the black-tailed deer	(*a*) Internal—in diet (*b*) Internal—as ingredient of soup	(*a*) Fever, haemothermia, tendency to abortion (*b*) Chronic diarrhoea
62 KALĀVIṄKA PURĪṢA *Ci* 25, 100	Droppings of house sparrows	External—for local application	Non healing wounds with granulation on the surface

63 KAPIÑJALA MĀMSA *Su* 5, 5, 6, 43, 15, 16, etc , *Śa* 8 24, *Ci* 3, 190, 4, 41, 19, 50, etc	Flesh of the common partridge	(*a*) Internal—in diet (*b*) Internal—meat juice used in diet	(*a*) Vitiated breast milk, tendency to abortion, etc (*b*) Chronic diarrhoea, dysentery
64 KAPOTA MĀMSA *Su* 26, 84, 27, 52, 73, *Ci* 4 41, 23, 203, 208	Flesh of the pigeon	Internal—in diet	Excessive urination, haemothermia
65 KAPOTA PURĪṢA *Ci* 23, 207 208 25, 53 100	Pigeon s droppings	External—for local application	Poisonous bites, suppurations, granulated non healing wounds
66 KĀRANḌA ANḌA *Su* 27 41, *Si* 12, 19/2	Duck s egg	Ingredient of nutritive enema	Sexual debility, pectoral lesion, spleen diseases female disorder
67 KARKAṬAKA RASA *Si* 12 18/7	Crab-meat juice	Ingredient of nutritive enema	Sexual debility
68 KHANGA MĀMSA *Su* 27 39 84 *Śa* 8 62 *Ci* 8 154	Rhinoceros flesh	Internal—in diet	Emaciation pallor etc
69 KHARA ASTHI *Su* 27 35 *Śa* 8 34 41 *Ci* 6 24 7 168	Bones of the ass	External—the ashes as ingredient of ointment	Leucoderma
70 KHARA KARĪṢA *Su* 14 26 60 *Ci* 14 41 17 116	Ass s dung	(*a*) Inhalation of the fumes when burnt (*b*) External—in ointment (*c*) Internal—in infusion with honey	(*a*) As diaphoretic (*b*) Piles (*c*) Hiccup *congestion of phlegm*
71 KHARA MĀMSA *Ci* 8 158	Ass s flesh	Internal—in diet	Emaciation
72 KHARA MŪTRA *Su* 1 104	Ass s urine	Internal—as drink	Epilepsy insanity
73 KRAKARA MĀMSA *Su* 27 49 *Ci* 4 50	Snipe s flesh	Internal—in diet	Haemothermia
74 KRAVYĀDA MĀMSA *Su* 22 57	Flesh of carnivorous animals	Internal—in diet	Consumption , piles
75 KṚṢNASARPA VASĀ *Ci* 14 48 26 259	Fat of the cobra	(*a*) Inhalation of the fumes when burnt (*b*) External—as local application	(*a*) Piles (*b*) Eye-diseases
76 KṢAUDRA *Sū* 6 39 7 61 etc *Vi* 7 32, *Ci* 1/1, 4 ,51, 1/2 4 , etc	Honey	(*a*) Internal—as an adjunct in *many medicinal prescriptions* (*b*) Internal—in diet	(*a*) & (*b*) All diseased and weak *conditions*
77 KUKKUṬA ANḌAKAPĀLA *Ci* 26 253	Shell of the hen s egg	External—as ingredient of ointment	Diseases of the vision, defects of the palate
78 KULINGA ANḌA *Si* 12 19/1	Sparrow s egg	Ingredient of nutritive enema	As in Jivajiva anda (No 56)
79 KUÑJARA NAKHA *Ci* 10 40	Elephant s nail	Inhalation of the fumes when burnt	Epilepsy

TABLE 2

Medicinal Substances of Animal Origin and their Uses—(Contd.)

Name and synonyms in Caraka, with references	English equivalent	Mode of use or application	Medicinal uses in
80 KURAṄGA RASA *Sū* 27, 45; *Śa*, 8, 24, *Ci* 3, 19	Meat juice of the antelope	Internal—in diet	Tendency to abortion in pregnancy, fever
81 KURARA MŪTRA, NAKHA, PITTA, PURĪṢA, CAÑCU, PAKṢA, *Ci* 17, 118	Urine, nails, bile, droppings, beak and feathers of the osprey	(*a*) Inhalation of the fumes when burnt (*b*) External—ashes as ingredient of ointment	(*a*) & (*b*) Piles
82 KŪRMA RASA *Sū* 27, 40, 84, *Ci* 5, 169, 14, 129	Meat juice of the large tortoise	Internal—in diet	Flatulence, rheumatism, etc.
83 KŪRMA VASĀ *Ci* 28, 128	Fat of the tortoise	External—as nasal medication	Flatulence, rheumatism, etc.
84 LĀKṢĀ (JATU) *Ci* 9, 61, 11, 15, etc	Lac	(*a*) As fumigator (*b*) Ingredient of cigars (*c*) Internal—in mixed decoction (*d*) Internal—in linctus (*e*) Internal—in medicated ghee (*f*) Internal—in pills	(*a*) As insecticide and vermicide (*b*) Hiccup, deep-seated phlegm (*c*) Ulcers and lesions of the thoracic cavity, dysuria, lithiasis, etc (*d*) & (*e*) *Toxicosis, skin eruptions*, eye diseases, defects of vision, mouth diseases, fistula, etc (*f*) Loss of skin pigment
85 LAVA-MĀṂSA *Sū* 5, 5, 6, 25, etc, *Śā* 8, 24, *Ci* 3, 190, 4, 41, etc	Flesh of the bustard quail	(*a*) Internal—in diet (*b*) Internal—the meat juice as ingredient of soup	(*a*) Consumption, haemorrhage, tendency to abortion, etc (*b*) Acute alcoholism, cardiac and pulmonary diseases, haemoptysis, chronic diarrhoea, etc
86 LOPĀKA MĀṂSA *Sū* 27, 36, *Ci* 14, 126, 207 *Syn* ŚṚGĀLA-MĀṂSA *Ci* 8, 152	Flesh of the fox	(*a*) Internal—in diet (*b*) Internal—the meat juice in diet	(*a*) Consumption, emaciation (*b*) Bleeding piles
87 MADHŪCCHIṢṬA *Sū* 3, 16, *Ci* 7, 121, 11, 17, etc	Bee's wax	(*a*) Inhalation of burning fumes (*b*) As medium in cauterization (*c*) External—in ointment (*d*) External—in medicinal oil for massage (*e*) Internal—in mixture (*f*) Internal—in medicated ghee	(*a*) Cough, coryza, hiccup, etc. (*b*) Deep-seated pus (*c*) Dermatosis, painful wounds (*d*) Rheumatic pain in joints, fractures and dislocations (*e*) Pain in hypogastric region (*f*) Biliousness, haemothermia, etc

88 MAHIṢA MĀṂSA *Ci* **2/1**, 42, **8**, 158, etc , *Si* **12**, 19/2	Buffalo-meat	(*a*) The meat juice as ingredient of nutritive enema (*b*) *Internal—in* diet (*c*) Internal—the meat juice in diet	(*a*) Deb lity, senile decay, *female* diseases, etc (*b*) Consumption, emaciation (*c*) Sexual debility
89 MAHIṢA ŚONITA *Si* **10**, 41	Buffalo-blood	Ingredient of nutritive enema	Haemorrhage
90 MAHIṢĪ DADHI *Ci* **26**, 88	Curds from buffalo s milk	Internal—in medicated ghee	Cough, h ccup, anaemia, jaundice, etc
91 MAHIṢĪ KṢĪRA *Su* **25**, 40 **27**, 219, *Ci* **11**, 83, **12** 26 etc , *Si* **10** 40, **12**, 19/1	Buffalo s milk	(*a*) *Ingredient of nutritive enema* (*b*) Internal—to be taken with cow s urine (*c*) Internal—in medicated ghee (*d*) Internal—in diet	(*a*) Sem nal weakness, recurrent fever, senile decay, female disorders, etc (*b*) Oedema (*c*) Consumptive cough (*d*) Insomnia, cough
92 MAHIṢĪ MŪTRA *Su* **1** 102 *Ci* **13** *151* **15** *181*	Urine of the sl e buffalo	(*a*) Internal—ingredient of liquid mixture (*b*) Internal—powder prepared by mixing the urine with plants, followed by incineration	(*a*) Piles oedema, abdominal diseases (*b*) Loss of appetite
93 MAHIṢĪ GHṚTA *Ci* **4** 101 **16**, 53 134 **23** 241	Buffalo-ghee	(*a*) External—ingredient of nasal application (*b*) Internal—ingredient of medi cated ghee	(*a*) Bleeding from tl e nose (*b*) Poisonous bites, jaundice, etc
94 MĀKṢIKA MADHU *Su* **5** 43, **27**, 243 etc *Ci* **4**, 83, **11**, 20, etc	Bee s honey	(*a*) External—for local applica tion with other ingredients (*b*) Internal—as an adjunct to many prescriptions	(*a*) Mouth diseases sore throat (*b*) In various diseases
95 MAKṢIKĀ VIṢṬHĀ *Ci* **17**, 132, **30**, 325	Dropp ngs of tl e house fly	(*a*) External—in nasal errhine (*b*) Internal—as pill	(*a*) H ccup (*b*) Vomiting
96 MĀRJĀRA MĀṂSA *Si* **12**, 18/5	Cat s flesh	The meat juice as ingredient of nutritive enema	Debility, broken ribs, misperistal sis retention of urine, etc
97 MĀRJĀRA NAKHA PITTA CARMAN, LOMAN MŪTRA, PURĪṢA *Ci* **9** 75 **10** 41	Nails, bile *skin fur* urine, and droppings of the cat	(*a*) Inhalation of the fumes (*b*) External—the ashes as ingre dient of eye-ointment (*c*) *External—in nasal medication*	(*a*) & (*b*) Insanity (*c*) Ep lepsy, insanity
98 MATSYA ĀMIṢA *Su* **3** 19, **5**, 11, etc , *Ci* **17**, 74 **24** *124*, *etc*	Flesh of fishes	(*a*) External—as warm poultice (*b*) External—the *flesh* ju ce as ingredient of medicated o l	(*a*) & (*b*) Rheumat c cond tions (*c*) *Indigestion intestinal worms*, debility

TABLE 2

Medicinal Substances of Animal Origin and their Uses—(Contd.)

Name and synonyms in Caraka, with references	English equivalent	Mode of use or application	Medicinal uses in
99 MATSYA-VASĀ *Ci* 25, 76, 28, 128	Fish oil	(*a*) External—in nasal medication (*b*) Internal—as ingredient of jellied sweets	(*a*) Debility (*b*) Painful wounds
100 MATSYA PITTA *Ci* 30, 103	Fish bile	External—for local application	Vaginal tumours
101 MAYŪRA-MĀṂSA *Su* 13, 83, *Ci* 4, 50, 5, 110, 10, 39, 12, 62, etc *Syn* ŚIKHI-MĀṂSA *Sū* 27, 58, *Śa* 8, 28 BARHI-MĀṂSA *Ci* 8, 150	Flesh of the peacock	(*a*) The meat juice as ingredient of nutritive enema (*b*) External—local application for absorption of venom (*c*) External—in nasal medication (*d*) Internal—in diet (*e*) Internal—the meat juice in mixture	(*a*) Debility, rheumatism of the lower body (*b*) Poisonous bites (*c*) Heart disease, facial paralysis, ear, nose and throat diseases (*d*) Emaciation, seminal weakness, consumption, etc (*e*) Oedema, diarrhoea, cardiac troubles, retarded development of the foetus
102 MAYŪRA-BARHA *Ci* 23, 98	Peacock's feathers	Burnt for fumigation	As vermicide, insecticide, and general disinfectant
103 MAYŪRA PĀDANĀLA *Ci* 17, 117	Talons of the peacock	Internal—the burnt ashes as ingredient of linctus	Hiccup, congestion of phlegm
104 MEṢA ŚAKṚT *Ci* 17, 116	Dung of the ram	Internal—in aqueous infusion with honey	Hiccup, congestion of phlegm
105 MṚGA RASA *Ci* 19, 73, *Ka* 12, 8, *Si* 12, 18/10	Meat juice of herbivorous forest animals	(*a*) Ingredient of nutritive enema (*b*) Internal—ingredient of soup	(*a*) Rheumatism of the lower limbs and organs (*b*) Enlarged spleen, dysentery
106 MUKTĀ *Ci* 17, 125	Pearl	Internal—powdered and made into linctus	Hiccup, cough
107 NAKULA-MĀṂSA *Ci* 8, 152, *Si* 12, 18/5	Flesh of the mongoose	(*a*) Ingredient of nutritive enema (*b*) Internal—in diet	(*a*) Sexual debility (*b*) Consumption
108 NAKULA-PURĪṢA *Ci* 10, 51	Dung of the mongoose	Inhalation of the fumes when burnt	Epilepsy, insanity
109 NAKRA ANDA *Ci* 2/2, 28	Crocodile egg	Internal—as ingredient of sweetened pancakes	Seminal weakness, sexual debility

110 NAKRA RETAS *Ci* **2/1**, 48	The sperm of the crocodile	Internal—in diet, cooked with fowl's flesh	As a powerful aphrodisiac
111 NAKRA VASĀ *Ci* **28**, 128	Crocodile fat	External—in nasal medication	Rheumatism of the joints
112 NĀRĪ KṢĪRA *Sū* **27**, 224 *Ci* **15** 230 **17**, 131, **22**, 23	Human milk	(*a*) External—as ingredient of nasal medication (*b*) External—in eye-ointment (*c*) Internal—in diet	(*a*) Haemothermia, hiccup, excessive thirst (*b*) *Opthalmia* (*c*) Excessive hunger, emaciation, debility
113 PĀNDAVIKA MĀMSA *Sū* **17**, 56	Flesh of the wood pigeon	Internal—in diet	Debility, emaciation
114 PĀRĀVATA RASA *Ci* **4**, 41, **19**, 72, **22**, 29	Meat juice of the dove	Internal—in diet	Haemothermia, excessive thirst, dysentery
115 PĀRĀVATA-ŚAKṚT *Ci* **14**, 55	*Droppings of the dove*	External—in ointment	Piles
116 PIPĪLIKĀ *Ci* **13**, 187	Ants of the big black species	Surgical use (vide text, p 24)	Intestinal perforation
117 PLAVA ASTHI *Ci* **26**, 246	Bones of the pelican	External—the ashes as ingredient of eye-ointment	Eye diseases
118 PRASAHA KṢĪRA *Ci* **29**, 137	Milk of the tearer group of animals (vide Table 1)	External—as ingredient of poultice	Stiffness cramps pricking pain, swelling
119 PRASAHA MĀMSA *Ci* **8**, *160* **15**, *210* **18**, 156 **24**, 124	*Flesh of the tearer group of* animals	(*a*) *External*—as poultice (*b*) Internal—in diet (*c*) Internal—the meat juice as diet	(*a*) Stiffness cramps pricking pain swelling (*b*) Indigestion loss of appetite, consumption (*c*) Painful oedema of the groin and buttocks
120 PRATUDA MĀMSA *Ci* **6**, 16 **8**, 161 185 **29**, 50	Flesh of the pecker group of birds (Table 1)	(*a*) Internal—in diet (*b*) Internal—the meat juice as diet	(*a*) Consumption (*b*) Urinary disorders, rheumatism etc
121 PRATUDA VASĀ *Ci* **29**, 74	Fat of the pecker group of birds	External—as ingredient of medicated ghee	Rheumatism
122 PRAVĀLA (VIDRUMA) *Ci* **1/1**, 58, **1/4**, 22 **17**, 125 **26**, 56 246	Coral	(*a*) External—powdered and used in medicated ghee (*b*) External—powdered and used in eye-ointment (*c*) Internal—as infusion of the powder in rice water (*d*) Internal—the powder made into linctus	(*a*) Acute spreading inflammation (*b*) Eye-diseases (*c*) Dysuria (*d*) Hiccup cough
123 PṚṢAD-RASA *Ci* **3**, 191	Meat juice of the spotted deer	(*a*) Ingredient of nutritive enema (*b*) Internal—in diet	(*a*) As in Jīvajīva anda (56) (*b*) Fever toxicosis

TABLE 2

Medicinal Substances of Animal Origin and their Uses—(Contd.)

Name and synonyms in Caraka, with references	English equivalent	Mode of use or application	Medicinal uses in
124 RĀJAHAṀSA RASA Si 12, 18/1	Meat juice of the swan	Ingredient of nutritive enema	Weakness, oligospermia, sexual debility
125 ṚKṢA MĀṀSA Ci 8, 153	Bear's flesh	Internal—in diet	Consumption
126 ṚKṢA VASĀ Ci 26, 47 30, 112	Bear's fat	(a) External—local application (b) Internal—used in decoction	(a) Prolapsed uterus (b) Dysuria
127 ROHITA ĀMIṢA Ci 2/4, 18 Si 12, 18/4	Flesh of the red carp fish	Internal—in diet	Indigestion, weakness, sexual debility
128 ROHITA PITTA Ci 23, 183	Bile of the red carp fish	External—as ingredient of eye ointment	Poisonous bites in the region of the eyes
129 ŚALLAKA CARMAN LOMAN MŪTRA, NAKHA, PITTA, ŚAKṚT Ci 9, 75	The hide, fur, urine, nails, *bile, and droppings* of the porcupine	(a) Inhalation of the fumes when burnt (b) External—the ashes as ingredient of ointment	(a) Insanity (b) Epilepsy
130 ŚALLAKA ASTHI Ci 17, 117	Bones and quills of the porcupine	Internal—the ashes as ingredient of linctus	Severe hiccup
131 ŚALLAKA MĀṀSA Sū 27, 71 Ci 17, 112	Flesh of the porcupine	(a) The meat juice as ingredient of nutritive enema (b) Internal—in diet (c) Internal—the meat juice in liquid mixture	(a) Severe injuries, fracture, uraemia, constipation (b) Loss of appetite, congestion of phlegm etc (c) Flatulence, rheumatism
132 SAMBHARA MĀṀSA Sū 27, 46 Śā 8, 24	Flesh of the sambhara deer	Internal—in diet	Tendency to abortion in pregnancy
133 ŚAṄKHA CŪRṆA Sū 27, 40, Ci 3, 262, 4, 79 etc	Conch shell powder	(a) External in ointment (b) External—in poultice (c) Internal—in linctus	(a) Persistent skin diseases (b) Eye-diseases (c) Cough, hiccup
134 ŚAPHARI Ci 2 4 17	*A kind of small fish*	Internal—in diet	Sexual debility
135 SĀRASA AṆḌA Si 12, 17, 19/2	Crane's egg	Ingredient of nutritive enema	Seminal weakness, debility
136. SĀRASA ASTHI Ci 26, 55	Bones of the crane	Internal—powdered and used as ingredient of medicine	Dysuria
137 SARPA NIRMOKA Ci 14, 49	Cast-off slough of the snake	Inhalation of the fumes when burnt	Piles

138 ŚAŚA MĀMSA *Su* **15** 7 **27**, 45, 76, *Śā* **8** 24, *Ci* **3** 191, **4** 41 **26**, 175, etc	Flesh of the rabbit or hare	(*a*) Internal—in diet (*b*) Internal—the meat juice used in medicated ghee	(*a*) Fever, mild rheumatism, alcoholism, haemothermia (*b*) Diseases of the head
139 ŚIKHI ANDA *Si* **12**, 17 19/1, 24 *Syn* BARHI ANDA *Ci* **2/1**, 49	Egg of the pea hen	(*a*) Ingredient of nutritive enema (*b*) Internal—in diet	(*a*) As in Jīvajīva anda (56) (*b*) Seminal weakness
140 ŚIKHI PADA *Ci* **18**, 170	Peacock's claws	Internal—the ashes as ingredient of medicated ghee	Hiccup cough
141 ŚIKHI PITTA *Ci* **7** 170 **23**, 51 217	Peacock's bile	(*a*) External—in ointment (*b*) Internal—in pills (*c*) Internal—in medicated ghee	(*a*) Leucoderma (*b*) Poisoning (*c*) Poisonous bites
142 SIMHA MĀMSA *Ci* **8**, 153	Flesh of the lion	Internal—as diet	Consumption
143 SIMHA MŪTRA *Ci* **10**, 41	Urine of the lion	External—as nasal medication	Epilepsy
144 SIMHA VASĀ *Ci* **3**, 306	Lion's fat	Internal—in medicated ghee	Recurrent fever
145 ŚRGĀLA MŪTRA *Ci* **10**, 41	Jackal's urine	External—in nasal medication	Epilepsy
146 ŚRGĀLA PITTA *Ci* **9**, C7	Bile of the jackal	External—ingredient of eye-ointment	Eye diseases
147 SŪKARA MĀMSA *Ci* **17**, 74	Pork	Internal—in diet as soup	Hiccup
148 ŚVA MŪTRA *Ci* **10**, 41	Dog's urine	External—as nasal medication	Epilepsy
149 ŚVA PITTA *Ci* **10**, 50	Dog's bile	Inhalation of the fumes when burnt	Epilepsy
150 ŚVĀVIT MĀMSA *Ci* **14**, 126, **17**, 112	Flesh of the pangolin	Internal—in diet	Hiccup rheumatism
151 ŚYENA RASA *Su* **27**, 36	Meat juice of the hawk	Internal—in diet	For proper growth of the foetus
152 TĀMRACŪDA RASA *Si* **2**, 32, *Śā* **8**, 28	Meat juice of the red-crested cock	Internal—in diet	Diseases of the urethral passage, abnormal growth of the foetus
153 TARAKṢU MĀMSA *Ci* **8**, 153, *Si* **12**, 19/1	Flesh of the hyena	(*a*) Ingredient of nutritive enema (*b*) Internal—in diet	(*a*) As in Jīvajīva anda (56) (*b*) Consumption
154 TITTIRI MĀMSA *Śā* **8**, 28, *Ci* **2/1**, 41, **11**, 70 etc	Flesh of the grey partridge	(*a*) Internal—as ingredient of sweetened jelly (*b*) Internal—in diet	(*a*) Rheumatism, emaciation, menstrual disorders, sterility in women (*b*) Constipation, piles, jaundice, etc

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TABLE 2

Medicinal Substances of Animal Origin and their Uses—(Contd.)

Name and synonyms in Caraka, with references	English equivalent	Mode of use or application	Medicinal uses in
155 ULŪKA-CARMAN, MŪTRA, NAKHA, PURĪṢA, PITTA Ci 9, 75	Skin, urine, nails, dung and bile of the owl	(*a*) Inhalation of the fumes when burnt (*b*) External—prepared for local application	(*a*) & (*b*) Insanity
156 ULŪKA-MĀṂSA Ci 8, 150	Flesh of the owl	Internal—in diet	Consumption
157 UṢṬRA KARĪṢA Sū 14, 26; Ci 17, 116	Camel-dung	Burnt for fumigation	As a diaphoretic
158 UṢṬRA-MĀṂSA Ci 8, 158, 14, 126	Flesh of the camel	Internal—in diet	Emaciation, flatulence
159 UṢṬRA-MŪTRA Sū 1, 103	Camel's urine	Internal—as drink	Hiccup, cough, piles
160 UṢṬRA-VASĀ Ci 14, 48	Camel's fat	(*a*) Inhalation of the fumes when burnt (*b*) External—for local application	(*a*) & (*b*) Piles
161 UṢṬRĪ-PAYAS Ci. 13, 107, 183, 22, 23	Camel's milk	(*a*) Internal—to be used as exclusive diet for one month (*b*) Internal—in diet	(*a*) Oedema (*b*) Constipation, colic pain, debility, etc
162. VASTĀ-CARMAN, MŪTRA, NAKHA, PURĪṢA, PITTA Ci 9, 75	Hide, urine, nails, dung and bile of the she-goat	(*a*) Inhalation of the fumes when burnt (*b*) External—prepared for local application	(*a*) & (*b*) Insanity
163 VASTA-MŪTRA Ci 9, 71, 10, 26, etc	Urine of the he-goat	(*a*) External—in ointment (*b*) External—in nasal medication (*c*) External—in eye-ointment (*d*) Internal—in medicated ghee	(*a*) Epilepsy, toxicosis, piles, vaginitis, cervicitis (*b*) Insanity (*c*) Dimness of vision, infection and discharge of pus (*d*) Cardiac seizures
164 VARĀHA-MĀṂSA Sū 27, 78; Ci 2/4, 11, 18, 80	Hog's flesh	Internal—in diet	Emaciation, loss of appetite, neuralgia, sexual debility
165. VARĀHA-PITTA Ci. 5, 175	Hog's bile	External—for local application	Tumour inside the vaginal passage
166. VARĀHA-ŚOṆITA Ci. 7, 122; 30, 110	Hog's blood	(*a*) External—as skin lotion (*b*) Internal—as ingredient of acidulated drink	(*a*) Cutaneous eruptions (*b*) Amenorrhoea

167 VARĀHA ŚAKṚT Ci 14, 51, 17, 116	Hog's dung	(a) Inhalation of the fumes when burnt (b) Internal—the aqueous extract in linctus	(a) Piles (b) Hiccup deep-seated phelgm
168 VARĀHA VṚṢANA Si 12, 18/8	Hog's testes	Ingredient of nutritive enema	Sexual debility
169 VARTAKA MĀMSA Su 27, 48, Ci 4, 41, 250 5, 110, etc	Flesh of the button-quail	Internal in diet	Flatulence, enlarged spleen, haemothermia
170 VIṢKIRA MĀMSA Su 27, 48, Ci 6, 19, 8, 161 etc	Flesh of the gallinaceous birds (Table 1)	(a Ingredient of nutritive enema (b) Internal in diet	(a) Sexual debility, dysuria (b) Rheumatic conditions, excessive bile secretion, etc
171 VṚKA CARMAN MŪTRA, NAKHA, PITTA ŚAKṚT Ci 9, 75	Hide urine nails dung and bile of the wolf	(a) Inhalation of the fumes when burnt (b External prepared for local application	(a) & (b) Insanity
172 VIṢADAMŚA VASĀ Ci 14, 48	Fat of the animals of the feline species	(a) Inhalation of the fumes when burnt (b) External -as local application	(a) & (b) Piles
173 VIṢADAMŚA CARMAN Ci 14, 49	Hides of animals of the feline species	External for local application of the fumes when burnt	Piles
174 VṚṢA RASA Si 12, 18/6	Meat juice of the bull	Ingredient of nutritive enema	Sexual debility
175 VṚṢA VṚṢANA Si 12, 18/2	Testes of the bull	Ingredient of nutritive enema	Sexual debility
176 VYĀGHRA MĀMSA Ci 8, 153	Flesh of the tiger	Internal—in diet	Consumption
177 VYĀGHRA-VASĀ Ci 3, 305	Tiger's fat	External—as nasal medication	Recurrent fevers

13 ĀMRA *Su* 2 28, etc *Syn* Sahakara	Mango tree *Mangifera indica* Linn	The fresh fruit used alone with other substances (internal), the powdered stone (external)	Assimilation disorders, etc, the stone used for restoring normal colour of skin
14 ĀMRATAKA *Ci* 22, 35, etc *Syn* Śṛngi	Hog plum tree *Spondias mangifera* Willd	The fruits as ingredient of sweet jelly	Fainting, neuralgia, painful piles, cardiac disorders, etc
15 ANKOṬA *Su* 27 159, etc *Syn* Ankola Nikocaka	Alangy *Alangium lamarckii* Thw	The fruit as ingredient of medicated ghee	Chronic poisoning epilepsy, etc.
16 APĀMĀRGA *Su* 2, 3 etc *Syn* Pratyakpuṣpī Śaikhar ka, Mayuraka	Rough chaff tree *Achyranthes aspera* Linn	The dried fruits alone or in prescriptions (internal)	Parasitic infection of the head, hemicrania, as errhine
17 ĀRAGVADHĀ *Su* 1 83, etc *Syn* Caturāngula Kṛtamala Karnikara, Sampaka Prāgraha Rajavṛksa	Indian labarnum *Cassia fistula* Linn	The sap, root, bark and leaves used in prescriptions (internal)	Misperistalsis in infants and in chronic skin affections, as diuretic and purgative
18 ĀRDRAKA *Vi* 8 142 etc *Syn* Śṛngavera Visvabhesaja Nagara	Ginger tree *Zingiber officinale* Rosc	The dried tubers used as spice or in prescriptions (internal)	Abdominal diseases indigestion, consumption, etc
19 ARIMEDA *Vi* 8, 144 etc	White babool tree *Acacia leucophloea* Willd.	The bark or pith used in decoctions (external)	*Dental and oral diseases*
20 ARJAKA *Su* 14 32 etc *Syn* Kalamalaka Kuṭareka Sumukhā, Phaniȷȷaka	Shrubby basil *Ocimum gratissimum* Linn	The pulp or juice of the leaves used in prescriptions (external)	Skin infections, oedema, etc
21 ARJUNA *Ci* 8, 129 etc *Syn* Dhananjaya, Kakubha	Arjun tree *Terminalia arjuna* Bedd	The bark and leaves used in prescriptions (internal)	Diarrhoea, ulcers, cardiac disorders, etc
22 ARKA *Ci* 23, 56	Madar tree *Calotropis gigantia* R Br	Milky exudations from the bark *used in prescriptions (external)*	Poisoning, bites, wounds, etc, as *laxative*
23 ARUKA *Su* 25, 39, etc *Syn* Āluka	Peach tree *Prunus persica* Linn	The fruits taken alone	Tonic food
24 ASANA *Su* 25, 49 etc *Syn* Bijaka, Priyaka	*Terminalia tomentosa* Bed	A decoction of the bark used in prescriptions (internal)	Rheumatism fever, urinary diseases, etc
25 AŚMANTAKA *Su* 1 114 etc *Syn* Ambuda, Kovidara	Ebony tree *Diospyros montana*	A decoction of the leaves (internal)	Piles diseases of the head, as emetic, purgative, etc
26 AŚOKA *Su* 4, 18/2	Asoka tree *Saraca indica* Linn	A decoction of the flowering buds and seeds in prescriptions (internal)	Haemothermia haemorrhage, as sedative, purgative, etc
27 AŚVAGANDHĀ *Su* 3, 8, etc. *Syn* Aśvāvarohikā, Kaṭṭaka, Kakoli	Winter cherry *Withania somnifera* Dunal	The leaves and roots used as ingredients of medicinal oil or ghee	Skin diseases, hiccup, consumption, etc
28 AŚVATTHA *Su* 25, 49, etc. *Syn.* Bodhivṛkṣa, Sebya, Gajabhakṣa, Kṣ radruma	Sacred fig *Ficus religiosa* Linn	The tender roots or the bark, in paste form (internal and external)	Skin infections, wounds etc, as *roborant and purgative*

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd.)

Name in Caraka reference, and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
29 ATASĪ G 8, 176 etc. Syn Haimavatī, Umā, Masṛṇā	Linseed tree, flax *Linum usitatissimum* Linn.	The decoction of the seeds and leaves used in prescriptions (internal)	Urinary diseases, anaemia, consumption, etc
30. ATIBALĀ G 3, 267, etc Syn Vāṭyāyanī, Vāṭyapuṣpī	Indian sida *Sida rhombifolia* Linn	Extract of entire plant used in prescriptions (internal)	Fevers, loss of vitality, rheumatic conditions, etc.
31 ATIVIṢĀ G 3, 201, etc Syn Mahauṣadhā, Prativiṣā, Śuklakāṇḍā, Śvetā	Indian aconite *Aconitum heterophylum* Wall	The root and tuber used in prescriptions (internal)	Dysuria, fever, leucoderma, obesity, diarrhoea, etc
32 ĀTMAGUPTĀ G 18, 76, etc Syn Adhugandhā, Ajaḍā, Kacchurā, Kapikacchu, Lāṅgulī, Ṛṣabhī, Ṛṣyaproktā, Svaguptā, Śyāmaguptā	Cowage plant *Mucuna pruriens* Dc	The decoction of the root and seeds as ingredients of medicated ghee, etc	Cough, muscular stiffness, facial paralysis, general weakness, etc
33 AVĀKPUṢPĪ G 7, 114, etc. Syn Aticchatrā, Chatrā, Karavī, Śatapuṣpā	Indian borage *Trichodesma indicum* R Br	Extract of the leaves in oil as ingredient of medicated ghee	Leprosy, dermatosis, piles, etc
34 BADARĪ G 14, 214, etc Syn Badara, Kuvala, Sauvīra, Phenila	Jujuba fruit tree *Zizyphus jujuba* Linn	A sweetened decoction of the leaves used in prescriptions (internal)	Piles, loss of voice, giddiness, etc
35 BAKULA Ci 7, 21, etc. Syn Kesara, Siṃhakesara, Sthirā, Kumumā, Viśārada, Dhanvī, Madhupuṣpā	Bakula tree *Mimusops elengi* Linn	Extract of the bark and root with honey, or in medicated ghee	Helminthiasis, fever
36 BALĀ Su 2, 13, etc Syn Samaṅgā, Kharayaṣṭikā, Balinī, Jayantī, Bhadrabalā, Bhadraudanī	Heart leaf sida *Sida cordofolia* Linn	Decoction of the leaves used in prescriptions (internal)	Constipation, splenic disorders, for rejuvenation and for inducing conception
37 BHADRAMUSTĀ G 24, 145, etc Syn Kuruvinda	Nut grass *Cyperus tuberosus* Roth	Decoction of the *roots* used *in* prescriptions (internal)	*Cough, spitting of blood*, etc
38 BHALLĀTAKA G 3, 5, etc. Syn Bhallāta, Bhallātakī, Śailabīja, Aruṣkara	Marking nut tree *Semecarpus anacardium* Linn	Decoction of the nuts used in prescriptions (*internal* and external)	Obstinate skin diseases, poisoning, as vitalizer and for rejuvenation
39 BHĀRADVĀJĪ G 4 B 2, etc Syn Vaṅgīraja	Devil's cotton tree *Abroma augusta* Linn	Infusion of the leaves and roots used in prescriptions (internal and external)	Debility, female diseases, amenorrhoea, etc

40 BHĀRGĪ *Ci* 3 211, etc *Syn* Angāravallī, Phaṇji, Brahmayaṣṭhī, Bharangi	*Clerodendron serratum*	The roots used alone or as ingredient *of medicinal oil*	Cough, fevers, hard cutaneous *eruptions, etc.*
41 BHAVYA *Ci* 24, 136 etc *Syn* Bhava	Indian dillenia *Dillenia indica* Linn	Extract of fruit as ingredient of medicinal ghee	Urinary calculus, retention of urine, paralysis, etc
42 BHṚNGARĀJA *Ci* 18, 117, etc *Syn* Bhṛṅga, Bhṛṅgaraka Bhṛṅgara	Trailing eclipta *Wedelia calendulacea* Less	The plant juice taken with honey	Cough, grey hairs and senility
43 BHŪRJA *Su* 3, 4, etc *Syn* Bhurjapatra Citratvak Bhuja Carmi	Bhojapatra tree *Betula bhojapatra* Wall	The nodes and bark compounded into ointment	Ringworm, acute spreading suppurations, ulcers
*44 VIBHĪTAKA *Su* 4, 13, etc. *Syn* Aksa, Vibhitaki Tusa Vibhita Kamaghna	Beleric myrobolan *Terminalia belerica* Retz	The dried fruits used alone or in prescriptions (internal)	Cough, heart disease, etc, as purgative and blood cleanser
45 BĪJAPŪRAKA *Ci* 5 166 etc *Syn* Bijapura Matulanga Kesarāmla	Adam s apple tree *Citrus medica* Linn	The fruit taken alone or in prescriptions (internal)	Colic pain alcoholism, as appetizer
46 BILVA *Su* 2 19 etc *Syn* Śriphala Śailapatra Tripatra, Mahāphala Mahakap ttha	Bengal quince *Aegle marmelos* Corr	The fruit used alone or in prescript ons (internal)	*Diarrhoea constipation, in rejuvenation*
47 BIMBĪ *Su* 1 78 etc *Syn* Tundi Piluparnī, Oṣṭhī, Bimba, Bimbaka Raktaphala Tiktatuṇḍī	Kunch tree *Cephelendra indica* Naud	The dried root or juice used in prescript ons (internal and external)	Hard tumours, piles, as purgative and emetic
48 BRĀHMĪ *Su* 8 58 etc *Syn* Vayastha, Surasa Somavallarī, Subarcala	Indian pennywort *Herpestis monniera* H B & K	The dried and powdered plant used in prescriptions (internal)	Senile decay, loss of memory, as preventive of abort on
49 BRIHATĪ *Ci* 19, 26, etc *Syn* Mahati Hinguli Prasaha, Bṛhatikā Vartaki, Kanta	Indian nightshade *Solanum indicum* Linn	The leaves and roots used in prescriptions (internal and external)	Diarrhoea, toxicosis, pain and oedema of the vagina
50 CANDANA *Ci* 1/1, 148, etc *Syn* Malayaja Gandhasara Śitahima	Sandal wood tree *Santalum album* Linn.	The powdered wood or paste in prescriptions (internal and external)	Diarrhoea, vomiting, chronic skin diseases, etc
51 CARAṬĪ *Ci* 9, 45 etc	*Ionid um suffruticosum* De	The plant used as ingredient of medicinal ghee	Insanity, epilepsy for proper growth in childhood
52 CAVIKĀ *Ci* 18 158 etc *Syn* Cavya Cavi Nakulī, Cavyaka	*Piper chaba* Hunter	Decoction of the roots and dried fruits used for medicinal ghee	Consumptive cough, indigestion, change of voice, emaciation, etc
53 CILLI *Su* 27, 98	Wild spinach *Chenopodium album* Linn	Cooked as a pot herb	As aid to elimination
54 CIRABILVA *Ci* 3 267 etc *Syn* Naktamāla Putiparṇa	Indian beech *Pongamia glabra* Vent	Decoction of the sprouts used in prescriptions (internal)	Fever, disorders of the spleen

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka reference and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
55 CIRMAṬA Ci 19 32 etc. *Syn* Kṣetracirmita, Pāṇḍuphala, Pāṭhyā	*Cucumis melo* Linn.	The seeds used in decoction The *fruit taken alone or as ingredient* of sweet drink	Dysentery, as laxative
56. CITRAKA Sū. 2, 28, etc. Syn Pāṭhi Dāruṇa, Raktacitraka, Uṣaṇa	White lead wort *Plumbago zeylonica* Linn	Decoction of the roots and leaves used in prescriptions for internal use	Urinary diseases, anaemea, etc, as laxative and digestive
57 CORAKA Sū. 3, 24 etc. *Syn* Parnacoraka, Phalacoraka, Kṣemaka	Indian angelica tree *Angelica glauca* Edgew	The roots and stalks used in internal and external prescriptions	Headache, epilepsy, hiccup, etc.
58 CUKRA Ci 8, 131	Wood sorrel tree *Rumex vesicarius* Linn	The extracted juice as ingredient of vegetable soup	Anorexia
59 CUÑCŪPARṆIKĀ Sū 27, 100	Coxcomb plant *Corcorus olitorius* Linn.	Cooked as a pot herb	As aid in elimination
60 DĀDIMA Sū 2, 20 etc. *Syn.* Dāḍ mba, Raktapuṣpa, Karaka	Pomegranate tree *Punica granatum* Linn.	The fruit juice taken alone or in prescriptions	Diarrhoea, cough, oedema, etc, as digestive and anti-emetic
61 DANTAŚAṬHA Ci. 3, 267, etc. *Syn.* Rocanaka, Jambhaka	Lemon tree *Citrus medica* Linn (Variety *C limonum* or *acida*)	The fruit juice taken alone or with drinks	Fever, as digestive
62 DANTIN Sū. 2 9 etc. Syn. Udumbaraparṇī, Nikumbha, Makulaka, Citrā	Wild croton *Balio perum montanum* Muell & Arg	The sun-dried *roots* used in prescriptions for internal use	Oedema, jaundice, stomach complaints
63 DARBHA Sū. 4, 12, etc Syn Kuśa, Kṣurapatra, Yajnika	Large variety of sacrificial grass *Eragrotis cynosuroides* Beauv	The extract of the grass used in prescriptions for internal use	Senility, wasting diseases, etc, for increasing lactation
64 DĀRUHARIDRĀ Sū 4, 11, etc. Syn Pitadru, Pitadāru, Pitatvak, Hemakānta	Indian barberry *Berberis asiatica* Roxb	The extract of the plant used in prescriptions for internal use	Haemorrhage, piles, pruritus, alopecia etc
65. DEVADĀRU Ci. 16 48, etc Syn. Śatapatraka Suradruma, Devadruma	Deodar tree *Cedrus lond* (Varieties *C Libani* Barrl & *C deodara*) H K & F	The dried leaves and the extract of the wood and roots used in prescriptions for internal use	Headache, intestinal worms, urinary diseases, menorrhagia, fistula, etc

66 DHĀMĀRGAVA *Ka* 4, 1, etc. *Syn* Karkoṭakī, Koṭhaphala, Mahājālinī, Rājakośātakī	Sponge-gourd *Luffa aegyptica* Mill	The fruits, flowers and tender leaves used in decoctions for internal use	Cough, toxicosis, phlegm, as purgative and emetic
67. DHANVAN *Ci.* 3, 258, etc *Syn* Dhanurvṛkṣa	Indian linden tree *Grewia tilliaefolia* Vahl	The powdered bark used internally in decoctions and externally in ointments	Fever, urinary diseases
68 DHĀNYAKA *Ci* 3, 182, etc *Syn* Tumburuka, Dhanyā, Dhanu, Dhanika, Bijadhānya, Kustumbura	Coriander plant *Coriandrum sativum* Linn	The entire plant used in prescriptions for internal use	As digestive, diaphoretic and an aid to virility
69 DHĀTAKI *Su* 4 15, etc *Syn* Bahupuspikā, Dhātrī, Kumuda, Kunjara, Tamrapuspī, Parvati	Fulsee flower tree *Woodfordia floribunda* Salisb	The flowers as ingredient of sweetened decoctions for internal use	Fever, haemothermia, as intestinal astringent
70 DHAVA *Su* 3 3, etc *Syn* Madhuravalka, Madhuratvak Vakavṛkṣa	Crane tree *Anogeissus latifolia* Wall	The resin as ingredient of medicinal oil for external application	Chronic skin diseases, senility, dysuria, snake bites, etc
71 DRĀKṢĀ *Ci* 5, 123 etc *Syn* Rasa, Rasālā Madhurasā, Kāśmirikā	Grape vine *Vitis vinifera* Linn	The shoots used in prescriptions the fruits used alone or in drinks	Haemothermia, cardiac disorders, cough, etc
72 DUGDHIKĀ *Ci* 8, 131, etc *Syn* Kṣirinī, Kṣiri, Svāduparṇī, Dugdhi	*Oxystelma esculentum* R Br	Ingredient of vegetable soup	Diarrhoea, painful bleeding piles, etc, as roborant
73 DUHSPARŚĀ *Ci* 24, 166	Khorasan thorn *Alhagi maurorum* Desu	Infusion in boiling water used in prescriptions (internal)	Acute alcoholism
74 DŪRVĀ *Ci* 3, 258, etc *Syn* Bhārgavī, Śataparvā, Tiktaparvā, Śatavīryā, Latā, Śitā	Couch grass *Cynodon dactylon* Pers	The grass leaves as ingredient of medicinal oil	Fever, neuralgic pain, etc, as haemostatic
75 ELA *Sū* 2, 4, etc *Syn* Bhṛngaparṇikā, Tuttha, Kṣudrela, Sukṣmaila	Lesser cardamom plant *Elettaria cardamomum*	The spice used alone or in prescriptions (internal)	Rhinitis hemicrania, pleural affections, etc
76 ELAPARṆI *Ci* 8, 131	Kulanjan plant *Alpinia galanga* Swartz	Ingredient of vegetable soup	Diarrhoea
77. ELVALUKA *Ci* 14, 159	Cherry tree *Prunus cerasus* Linn	The fruits and roots used in sweetened decoctions (internal)	Abdominal diseases, paralytic conditions, intestinal obstruction, etc
78 ERAKĀ *Sū* 3, 24, etc *Syn* Gundrā, Simbigundrā, Śṛngaverabhamūlaka	Elephant grass *Typha elephantina* Roxb	The decoction of the roots used in prescriptions (internal)	Headache, rheumatic conditions
79 ERAṆḌA *Su* 2, 12, etc. *Syn* Citrabija, Triputi, Tribija, Cancū, Maṇḍa, Uruvaka	Castor oil plant *Ricinus communis* Linn	The expressed oil used alone or in prescriptions (internal)	Misperistalsis, as purgative

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka reference and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
80. ERVĀKA Ci 26 52, etc Syn Lomaśa Toyaphala, Lomaśakāṇḍa, Vṛhatphala	Melon cucumber plant *Cucumis utilissimus* Linn	The seeds used in prescriptions (internal)	Urinary calculus, dysuria, diseases of the bladder
81 GAJAPIPPALĪ Ci 12, 41, etc Syn Karipippalī, Kuñjarapippalī, Kapivallī, Hastikaṇā	Elephant pepper plant *Scindapsus officinalis* Schott	The powdered dried fruit used in prescriptions (internal)	Piles, oedema, anaemia
82 GAVEDHUKA Sū 2, 25, etc Syn Gāvedhu Kṣudra	Job's tears *Coix lachryma Jobi* Linn	The seeds used alone or in infusion, or cooked as cereal	Emaciation and debility
83 HAṀSAPĀDĪ Ci 23 220 etc. Syn Godhāpadikā, Haṁsavatī, Haṁsapādikā, Vikrāntā	Maidenhair *Adiantum capillusveneris* Linn	The seeds used in prescriptions (external)	Suppurations due to poisonous bites, rheumatic conditions
84 HAPUṢA Sū 23 20 etc Syn Habuṣā, Vipuṣā, Vigandhikā	Juniper tree *Juniperus communis* Linn	The seeds in decoction or as ingredient of medicinal ghee (internal)	Female diseases dysuria, throat spasms, etc
85 HARIDRĀ Sū 4, 11 etc Syn Pītakā, Haridruma	Turmeric plant *Curcuma longa* Roxb	The dried tubers used in prescriptions (external and internal)	Dermatosis, toxicosis, senility, impaired vision, etc
86. HARĪTAKĪ Sū 13, 92, etc Syn Amṛtā, Śivā, Dibyā, Prāṇadā, Vayaḥsthā, Cetakī, Jīvanikā Abhayā	Chebulic myrobalan *Terminalia chebula* Rtz	The dried fruits and seeds taken alone or in prescriptions (internal)	Dermatosis, oedema, urinary diseases, as general tonic, blood purifier and purgative
87 HIṄGU Sū 2 29 etc Syn Hiṅguka	Asafoetida plant *Ferula foetida* Linn (Varieties *F foetida* Regel *F narthex* Boiss)	The dried fruits as ingredient of gruel	Cough, dysuria, dermatosis etc, as laxative, digestive, and rejuvenant
88. HIṄGUPARṆĪ Ci 9 57 etc	Emetic nut *Randia dumetorum* Lamk	A decoction of the nuts used in prescriptions (external and internal)	Inguinal swellings, spleen diseases, helminthiasis, etc
89 IKṢU Sū 4, 10 etc	Sugarcane *Saccharum officinarum* Linn	The juice used as drink or as ingredient of mixed drink, the roots used in prescriptions	Loss of voice, vomiting, morbid thirst, for longevity, as a roborant
90. IKṢURAKA Ci 4, 78, etc Syn Kṣuraka, Trikṣura, Vajra, Kokilākṣa	Long leaved barberia *Hygrophila longifolia* Nees	A decoction of the leaves and roots used alone or in prescriptions (internal)	Urinary calculus, haemothermia, as an aid to virility

91	INDRAVĀRUNI *Ci* **14**, 138	Bitter cucumber plant *Citrullus colocynthis* Schrad	Decoction of the fruits used in prescriptions (internal)	Piles
92	INGUDĪ *Ci* 1/3, 15, etc *Syn* Bhallakivṛksa, Tiktaka, Visagandhaka, Tailaphala	Zachum oil plant *Balanites roxburghi* Plarch	*The alkali from the plant-ash* used in prescriptions	Dermatosis, urinary diseases, for rejuvenation
93	ITKAṬA *Su.* **4**, 12/17, etc	Prickly sesban *Sesbania aculeata* Pers	Decoction of the grass roots as ingredients of prescriptions and ointment (internal and external)	Fever, for increasing lactation
94	JALAPIPPALĪ *Su* **27**, 171	Poison buttercup *Ranunculus sceleratus* Linn	The entire plant made into paste *for local application*	Ulcers
95	JAMBU *Su* **2**, 28 etc *Syn* Jambula, Mahājambu, Rajajambu, Kakajambu	Jambol tree *Eugenia fruticosa* Roxb or *Eugenia jambolana* Linn	Seeds, leaves and the stones of the fruits used in decoctions, the bark used in prescriptions (internal)	Diarrhoea, consumption, nausea, as astringent
96	JĀTIPHALA *Ci* **3**, 207, etc	Nutmeg trees *Myristica fragrans* Houtt	The fruits used in preparing medicinal oil (external)	Hard cutaneous eruptions, pruritus, poisoning etc
97	JAYĀ, *Ci* **9**, 45 *Syn* Jayanti	Sesban tree *Sesbania aegyptica* Pers	A decoction of the entire plant used in prescriptions (internal)	Insanity, strokes, epilepsy
98	JIMŪTA *Sū* **1**, 81, etc *Syn* Jimutaka Garagari, Veni Devatadaka	Bristly luffa *Luffa echinata* Roxb	The flowers and fresh fruits used in prescriptions, the powder of the dried fruit taken alone	For emesis and enema in fever consumption, anaemia, etc
99	JINGINĪ *Ci* **30**, 83, etc	Indian ash tree *Odina wodier* Roxb	Decoction of the leaves as ingredient of astringent douche	Morbid discharges from vagina
100	JĪRAKA *Ci* **2/1**, 43, etc *Syn* Jirā, Ajaji	Cumin plant *Cuminum cyminum* Linn	The seeds used in prescriptions (internal)	General tonic for all ailments, as an aid to virility
101	JĪVANTĪ *Su* **3**, 25, etc *Syn* Hemavatī, Jivaniya, Jivapuspa	Cork swallow wort *Dendrobium macrei* Linn.	The fruits taken alone or as ingredient of unguent or decoction	Snake-bite, chest congestion, cough, for rejuvenation and longevity
102	JŪRNĀJHYĀ *Su* **21**, 25, etc	Sorghum *Sorghum vulgare* Pers	Cooked as cereal food	Obesity, as cooling and astringent
103	JYOTIṢMATĪ *Su* **1**, 38, etc *Syn* Durmada, Jyotirlatā, Parāvatapadī	*Cardiospermum halicacabum* Linn	A decoction of the roots or seeds used in prescriptions (internal)	Headache rhinitis, fainting, as purgative
104	KADALĪ *Ci* **3**, 268, etc *Syn* Rambhā Sakṛtphala	Banana tree *Musa sapientum* Linn	The fermented fruit or the alkaline extract *of the ashes used in* prescriptions, the pith, bulb and roots also used (internal)	Dermatosis, leucoderma, piles, urinary *diseases*, abdominal diseases, blood vomiting
105	KADAMBA *Ci* **18**, 154 *Syn* Nipa Sidhupuṣpa, Bhṛngavallabha, Bhūmikadamba	Kadamba or wild cinchona plant *Anthocephalus cadamba* Mig	The resin or an extract of the bark used in prescriptions (internal)	Urinary anomalies, rheumatism, as sedative

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka, reference, and synonyms if any	Modern and botanical names	Mode of use	Medical uses in
106 KADARA Sū 25, 49, etc. Syn Varvara	Gum arabic tree *Acacia arabica* Willd	The gum or milky exudate or a decoction of the leaves used in prescriptions (internal)	Urticaria, fever, etc
107 KĀKAḌUMBARIKĀ Ci. 7, 170	Redwood fig tree *Ficus hispida* Linn	A paste of the fruits used in prescriptions (external)	Leucoderma
108 KĀKAMĀCĪ Sū 27, 89 etc. Syn Kākamācikā, Kākāhvā, Kākamātā	Black nightshade *Solanum nigrum* Linn	The entire plant cooked and used as vegetable	Skin lesions, oedema, etc, as aphrodisiac
109 KĀKANĀSĀ Ci 18, 40, etc Syn Kākatuṇḍaphala, Vāyasī	Indian penny *Hygrophila angustifolia* R Br	A paste of the leaves used in ointments or in medicated ghee (internal)	Hard nodules on the skin, jaundice, cough consumption, etc
110 KĀKĀṆḌOLĀ Sū 27, 31	Sword bean *Canavalia ensiformis* Dc	The lentils used as food	As an aid to elimination, as an aphrodisiac and an aid to virility
111 KAKKOLA Ci 26, 210, etc Syn Takkola, Sthulamarica, Koraka, Kaṭkolaka	Cubebs plant *Piper cubeba* Linn	A paste of the fruits as ingredient of medicinal oil or mouth wash	Oral and dental diseases, fevers, loss of voice, etc
112 KALAMBA Sū 27, 100	Wild pot herb *Ipomoea reptans* Poir	Cooked as a *pot herb*	As a digestive, a cooling agent and an aid to elimination
113 KĀLĀNUSĀRIKĀ Ci 26, 243	*Ichnocarpus frutescens* R Br	An extract of the leaves as ointment (external)	All eye-diseases, as a promotor of eyesight
114 KĀLAŚĀKA Sū. 27, 91, etc Syn. Kālaka	Jute plant *Corchorus capsularis* Linn	The cooked leaves (internal)	Poisoning oedema, intestinal stasis, etc
115 KALĀYA Ci 20, 37, etc	Chickling-vetch lentil *Lathyrus sativus* Linn	A decoction of the leaves (internal), the paste of the lentil for local application	Vomiting, nausea, suppurated wounds
116. KĀLEYAKA Sū 3, 26	Yellow sandal tree *Santalum flavum* Linn	A paste of the finely divided wood as ointment (external)	As a cooling agent
117 KAMALA Sū. 3, 24 etc Syn. Padma, Paṅkaja, Nalika, Ambuja, Kokanada, Puṇḍarīka	East Indian lotus plant *Nellumbium speciosum* Willd	The paste of the petals as ingredient of an *unguent*, cold aqueous extract used as drink	Nasal haemorrhage, dysuria

118 KAMPILLAKA *Su* 1, 83	The kamala dye plant *Mallotus phillppinensis* Muell	Extract as ingredient of medicinal oil and in internal prescriptions	Chronic skin diseases oedema, as purgative
119 KANAKAPUṢPI *Ci* 7, 167	Golden thistle or yellow thistle *Euphorbia thomsoniana* Boiss	The petals as ingredient of ointment	Leucoderma
120 KANṬAKĀRI *Su* 2 72 etc *Syn* Kaṇṭakārikā, Vyāghrī	Wild egg plant *Solanum anthocarpum* Schr & Wendl	Extract of the entire plant and fruits in prescriptions (internal)	Dysuria, misperistalsis etc, for rejuvenation
121 KAPITANA *Ci* 15, 126	Flowering peepul tree *Thespesia populnea* Solard	Extract of the root and bark used in medicated ghee	Bleeding piles pain in the rectal region etc
122 KAPITTHA *Ci* 6, 35 etc *Syn* Dantaphala Gandhaphala	Wood apple tree *Feronia elephantum* Corr	Powdered leaves made into linctus with honey the fruits used alone or in prescriptions (internal)	Urinary disorders chronic skin diseases toxicosis etc
123 KARAMARDA *Vi* 8, 140 etc *Syn* Jātipuṣpa Karamardaka	Bengal currant *Carissa carandas* Linn	A decoction of the fruits used in prescriptions (internal)	Disorders of the first humor
124 KARAÑJA *Su* 3, 3 etc	Indian beech tree *Pongam a glabra* Vent	The leaves soaked in ox bile and made into ointment dried powder in prescriptions (internal)	Dermatosis pain in stomach and spleen ear ache etc
125 KĀRAVELLIKA *Vi* 8, 143	Bitter gourd plant *Momordica charantia* Linn	The decoction of the fruits and leaves as ingredient of enema or in prescriptions (internal)	Cough haemothermia etc
126 KARAVĪRA *Su* 3, 15 etc. *Syn* Vīrā Vīraka Dibyapuṣpa	Roseberry spurge plant *Nerium odorum* Soland	A decoction of the root bark in water in prescriptions (internal)	Skin diseases toxicosis wounds, etc
127 KARCURA *Su* 27, 155	Zedoary tree or Sati plant *Curcuma zedoaria* Rosc	The fruit without the rind taken alone	Cough hiccup piles etc as appetizer
128 KARĪRA *Ci* 30, 82, etc *Syn* Tikṣṇakaṇṭaka	Caper plant *Capparis aphylla* Roth	The decoction of the leaves as ingredient of vaginal douche or rectal enema	Morbid discharges from the vagina retention of urine, stool and flatus
129 KARKANDHU *Su* 4, 13, etc *Syn* Karkandhuka	Wild jujuba plant *Zizyphus ecroplia* Mill	A decoction of the plant used in prescriptions or in warm enema (internal and external)	As purgative
130 KARKAṬAŚṚṄGI *Ci* 17, 101 etc *Syn* Karkaṭākhya Kulīraśṛṅgāya	*Rhus succedanea* Linn	The powdered nut in prescriptions (internal)	Cough hiccup nausea
131 KARKAṬAKĪ *Su* 27, 100	*Momordica cochinchinensis* Spreng	The cooked fruit used as an article of food	As an aid to elimination

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka reference, and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
132 KARKOṬAKA Ci 3, 189	*Momardica dioca* Roxb	Leaves and fruits cooked as vegetables	Fever, as an astringent
133 KĀRPĀSA Ci 26, 69 etc *Syn.* Kārpāsi, Picū	Levantine cotton tree *Gossypium herbaceum* Linn	A decoction of the root bark used in prescriptions (internal and external)	Dysuria, scabies, and scrofula
134 KARPŪRA Ci 28, 153	*Limonphila gratissima* Blume	The entire plant compounded into medicinal oil (internal)	Consumption, sallow complexion, as vitalizer
135 KARVUDĀRA Su 27, 99, etc *Syn* Kovidāra Śvetakāñcana, Vanarāja	White mountain ebony *Bauhinia racemosa* Lamk	As an article of food	Hemothermia, haemorrhage, as an aid to elimination
136 KĀŚA Sū 4, 12 etc *Syn* Śaradā, Kaśī, Camarapuṣpikā	Thatch grass *Saccharum spontaneum* Linn	A decoction of the grass (internal)	Senility, fever, as promoter of lactation
137 KĀŚAMARDA Ci 18, 117, etc *Syn* Kāsāri, Kāsamardaka	Senna sophera plant *Cassia sophera* Linn or *Senna purpuria* Roxb	The entire plant as an ingredient of medicated ghee	Cough, *female diseases, etc*
138 KĀŚMARĪ Ci 26, 167 *Syn* Kāśmarya Kāśmīrī Mahābhadra Bhadra	White teak *Gmelina arborea* Linn	A paste of the leaves as ingredient of medicated ghee	Stiffness of the back, facial paralysis, hoarseness, etc
139 KASERUKA Si 3, 21 etc *Syn* Kaseru	Tiger nut or rush nut tree *Scirpus grossus* Linn or *S kysoor* Clarke	A paste of the tubers (external and internal)	Rheumatism, *haemothermia*, wasting diseases, etc
140 KAṬAKA Ci 26, 251 etc *Syn* Ambuprasādana Tiktamarica, Toyaprasādaphala	Clearing nut tree *Strychus potatorum* Linn	A paste of the seeds used in ointment	Eye-diseases, failing eyesight, discharges from eyes, etc
141 KAṬABHĪ Ci 9, 70 etc *Syn* Pāṭalī, Ksudraśyāmā	White siris *Albizzia procera* Benth	The powdered bark made into a paste with goat's urine along with other ingredients (internal)	Intestinal worms, toxicosis, oedema, urinary disorders, etc
142 KAṬPHALĀ Si 28, 152	Bay berry tree *Myrica nagi* Thunb	The bark used in sweetened decoctions (internal)	Bronchial asthma, cough, diarrhoea, etc
143 KAṬṬAPHALA Ci 28, 152	Musk mallow *Hibiscus abelmoschus* Linn	A decoction of the seeds used in prescriptions (internal)	Vomiting spleen disorders, pectoral lesions, etc

144 KAṬṬAROHIṆĪ *Sū.* 23, 19 etc *Syn* Śataparvā Kaṭuka Śakulādanı Ariṣṭa, Aśokarohiṇya	Hellebore plant *Picrorh za kurrooa* Royle	A decoction of the roots and tubers in prescriptions (internal)	Dermatosis jaundice piles as a purifying agent for breast milk
145 KAṬVAṄGA *Sū* 25, 40 etc	Indian calosanthes tree *Ailanthus excelsa* Roxb.	A decoction of the leaves in prescriptions (internal)	Menstrual disorders pectoral lesions, diarrhoea etc
146 KEŚARA *Ci* 2/1 32 etc *Syn* Nāgakeśara Keśarī Tuṅgī	Fragrant poon *Ochrocarpus longifolius* Hook & Benth	The powdered dried buds used in prescriptions (internal)	Irregular fever jaundice etc
147 KHADIRA *Ci* 4, 70 etc *Syn* Somavalka	Catechu tree *Acacia catechu* Willd	The flowers or the fermented wine from the resinous exudate used in prescriptions (internal)	Haemothermia urinary disorders blood poisoning
148 KHARJURA *Sū* 23 38 etc.	Date palm *Phoenix sylvestris* Roxb	The dried fruits as food or in fermented liquors	Alcoholism wasting diseases, trauma erysipelas etc
149 KIRĀTATIKTA *Sū* 4, 12 etc *Syn* Kirātatiktaka Kaṭutikta Tṛṇanımba	Chiretta plant *Swertia chirata* Ham	The entire plant used in paste or decoction (internal)	Fever for purification of blood and breast milk
150 KODRAVA *Su* 21, 25 etc	Common millet *Paspalum scrobiculatum* Linn	Used as cereal food	Piles cough obesity etc
151 KAIDARYA *Sū* 4, 10 etc *Syn* Kaitarya	Curry neem plant *Murraya koenigii* Spreng	The leaves and barks used in decoctions (internal)	Intestinal worms dysuria hoarseness
152 KOŚĀMRA *Ci* 30, 82	Gum lac tree *Schleichera trijuga* Willd	The expressed oil used as ingredient of medicated applications (external)	All morbid discharges from the vagina
153 KRAMUKA *Sū* 25 49 etc *Syn* Jīrṇapatra	Betel nut *Areca catechu* Linn	A paste of the nut with sandal wood or in decoction with other drugs (internal)	Bronchial asthma anaemia anorexia skin diseases
154 KṚṢṆAŚAIREYAKA *Ci* 26, 268	Purple nail-dye plant *Barleria strigosa* Willd.	A decoction of the plant used in prescriptions (external)	All eye-affections skin discolorations, etc
155 KṚṢṆAŚANA *Ci* 26, 269	Flax hemp plant *Crotalaria verrucosa* Linn	The juice of the plant used in prescriptions (external)	As above
156. KṚTAVEDHANA *Su.* 1, 83 etc *Syn* Kośātak Mṛdaṅgaphala	Bitter luffa plant *Luffa acutangula* Roxb	The fruits and seeds used in prescriptions (internal) the flowers fermented as wine	As purgative and emetic as tonic
157 KṢAVAKA *Vi* 7, 17 etc *Syn* Kṣava Ugra	Sneeze-wort *Centipeda orbicularia* Lour	Extract of the seeds and leaves used in prescriptions (internal and external)	Helminthiasis fever dermatosis etc

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka reference, and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
158 KṢĪRAVALLĪ *Vi* 8, 139	Ring coronet tree *Holostemma rheedei* Wall	A decoction of the leaves in milk, used as ingredient of medicinal ghee	Disorders of the second humor
159 KṢĪRAVIDĀRĪ *Vi* 8, 139 Syn Kṣīralatā	Milky yam *Ipomoea digitata* Linn	As above	As above
160 KULATTHA *Sū* 2, 12, etc Syn Kulittha, Kulatthikā	Horse gram *Dolichos biflorus* Linn	The cooked pulse used as food or as paste in prescriptions (internal)	Misperistalsis, fever, emaciation cough, etc.
161 KUMĀRAJĪVA *Sū* 27, 100	*Putranjiva roxburghii* Wall	The leaves used as vegetable	As an aid to elimination
162 KUMMI *Vi* 8, 144	Saffron mango tree *Careya arborea* Roxb	A decoction of the leaves used in prescriptions (internal)	Disorders of the third humor, as astringent and purgative
163 KUMUDA *Sū* 27, 117, etc Syn Aravinda, Svetajalaja	White water lily *Nymphaea alba* Linn	The seeds and flowers taken raw	Urinary diseases, alcoholism, as intestinal astringent
164 KUNKUMA *Ci* 23, 55 etc. Syn *Rudhira, Vadrika, Kāśmīra, Agnisikhā*	Saffron plant *Crocus sativa* Linn	The powdered tendrils as ingredient of pills	Cataract, dimness of vision, night-blindness
165 KUṢMĀṆḌA *Sū* 27, 102	White gourd plant *Benincasa cerifera* Savi	Cooked as food, the plant used as vegetable	As a digestive and as an aid to elimination
166 KUṢṬHA *Sū* 3, 1, etc Syn Kuṭhika, Puṣkara, Kāśmīraja	Indian costus or Orris root *Saussurla lappa* Clark or *Iris florentina* Linn	The roots soaked in ox bile for external application, decoction or powder in prescriptions (internal)	Anaemia, chronic skin diseases, toxicosis, colic pain, cardiac *disorders*, etc
167 KUSTUMBAKA *Vi* 7, 17, etc Syn Dhanya Dhānyaka, Tumburuka	Coriander plant *Coriandrum sativum* Linn	Used in prescriptions and in enemas (internal and external)	Piles dermatosis, intestinal worms
168 KUSUMBHA *Sū* 13, 10 etc. Syn Latvā	Safflower plant *Carthamus tinctorius* Linn	The seeds or oil used as food or cooking medium, also for local application	Phlegm, urinary gravel, dysuria, insect bites
169 KUTAJA *Sū* 1, 83, etc Syn Kurci, Vatsaka, Girimallikā, Kuṭajat vaka, Sakra	Kurchi plant *Holarrhena antidysentrica* Wall	The bark and seeds used in prescriptions (internal and external)	Skin diseases, haemorrhage, fever, assimilation disorders, as purgative and emetic
170 KUTUMBAKA *Sū* 27, 93, etc	*Leucas linifolia* Spreng	The plant cooked as pot herb	As an aid to elimination

171. KŪVALA *Sū* **4**, 10, etc	Small jujuba plant *Zizyphus sativus* Gaertn	The fruits taken alone	As cordial and purgative
172 LAKṢMAṆA *Su* **27**, 101	Mandugora plant *Atropa mandragora* Linn	Cooked as pot herb	Constipation
173 LĀMAJJAKA *Su* **3**, 29	Geranium grass *Andropogon iwarancusya* Jons	The powdered and dried leaves for external application	Minor skin eruptions, body-odour
174 LĀNGALIKĪ *Su* **8**, 38	Superb lily *Ipomoea pestigridis* Linn	Inhalation of the fresh or dried powdered petals compounded with cow's urine (internal)	Labour pain pruritus, dermatosis as laxative
175 LASUNA *Su* **2**, 3	Garlic plant *Allium sativum* Linn	The spice used alone or in prescriptions (internal and external)	Rhinitis skin diseases intestinal worms leprosy etc, as aphrodisiac
176 LAVALĪ *Su* **27**, 145	Star gooseberry tree *Phyllanthus distichus* Muell	The fruits used alone	As astringent cordial and appetizer
177 LAVAṄGA *Ci* **26**, 210, etc *Syn* Lavangaka	Clove plant *Eugenia caryophyllata* Thunberg	The dried flowers alone or in medicinal oils	Cough, hiccup vomiting inflammatory conditions of the mouth and throat, halitosis
178 LODHRA *Su* **3**, 5 etc *Syn* Lodh Tilvaka	Lodh tree *Symplocos racemosa* Roxb	The dried root bark used in internal and external prescriptions	Obstinate skin diseases, haemothermia urinary diseases, as intestinal astringent
179 LONIKĀ *Ci* **14**, 123 *Syn* Lona Loni	Parschane plant *Portulaca oleracea* Linn	The plant cooked as vegetable	Piles
180 MADANA *Su* **1**, 81, etc *Syn* Piṇḍitaka	Emetic nut *Randia dumetorum* Lamk	The nuts and seeds used in various prescriptions containing honey and rocksalt for internal use	Fever piles dermatosis chronic rhinitis coryza, etc, as emetic and purgative
181 MADAYANTIKĀ *Ci* **10**, 21, etc *Syn* Medika	Henna plant *Lawsonia alba* Lamk	The entire plant as ingredient of medicinal ghee for internal and external use	Epilepsy, malignant jaundice grey hairs etc
182 MADHUPARṆĪ *Sū* **3**, 21 etc. *Syn* Madhuvṛkṣa Madhukapuṣpa, Madhukapuṣpī	Mohua tree Indian butter tree *Bassia latifolia* Roxb	The fruits taken alone or made into alcoholic beverages	Rheumatism fever spleen diseases, dyspepsia etc for rejuvenation and virility
183 MAHĀMEDĀ *Sū* **4**, 9/1, etc *Syn* Śatamuli Śatāvarī Śatapadī	Indian asparagus *Asparagus racemosa* Willd or *A sermentosa* Willd	Cooked as vegetable the bark and leaves used in prescriptions (internal)	As analgesic and as an aid to prolongation of life
184 MAHĀŚRĀVAṆĪ *Ci* **3**, 258, etc *Syn* Mahāśrāvaṇikā Alambuṣā	East Indian globe thistle *Sphaeranthus indicus* Linn	A decoction of the plant used in prescriptions (internal)	Fever rheumatism for rejuvenation

TABLE 3

Medicinal Plants and Plant Products and their Uses—(*Contd*)

Name in Caraka reference and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
185 MAKUṢṬHA *Sū* 26, 84 etc *Syn* Makuṣṭhaka	Moth bean *Phaseolus aconitifolius* Jach	The dried beans cooked as food	Fever haemothermia, consumption and wasting diseases
186 MĀLATĪ *Sū* 5, 73 etc. *Syn* Jātī Gandhamālatī	Malabar nutmeg plant *Aganosma caryophyllata* G Don	The stalks used in decoctions, also the essential oil of the petals in prescriptions (external)	Dermatosis female diseases etc, for oral hygiene
187 MĀMSĪ *Ci* 7, 87, etc *Syn* Jaṭāmāṃsī Jaṭī, Jaṭā, Lomaśā Nāladā	Musk root plant *Nardostachys jatamansi* De	The dried roots or leaves used in prescriptions (external and internal)	Skin diseases, piles, rectal prolapse, toxicosis urinary calculus, etc
188 MAṆḌŪKAPARṆĪ *Sū* 27, 95 etc *Syn* Maṇḍūkaparṇikā, Maṇḍukī	Indian pennywort *Hydrocotyle asiatica* Linn	A decoction of the leaves used internally	Pectoral lesions diarrhoea etc for rejuvenation
189 MAÑJIṢṬHĀ *Sū* 4, 10/2 etc	Indian madder *Rubia cordifolia* Linn	The powdered dried roots and fruits used in prescriptions (internal)	Skin diseases and diseases of the spleen
190 MARICA *Sū* 2, 3 etc	Black pepper plant *Piper nigrum* Linn	The dried seeds used as spice or in prescriptions (internal)	Rhinitis anaemia fainting, consumption, cough, etc
191 MĀRIṢA *Sū* 27, 100	Gangetic amaranth plant *Amaranthus gangeticus* Linn	Cooked as pot herb	As an aid to elimination
192 MADHUKA *Sū* 2, 7, etc *Syn* Atirasā Madhurasā, Madhulī Madhuyaṣṭikā Madhuyaṣṭyāhvā, Yaṣṭhimadhu Yaṣṭhimadhuka	Liquorice plant *Glycyrrhiza glabra* Linn	The stalks used alone and in various prescriptions (internal)	Cough hiccup, fever, spleen disorders as an aid to rejuvenation
193 MARUBAKA *Ka* 1, 23	Sweet marjorum *Origanum marjorana* Linn	A paste of the seeds in prescriptions (internal)	As emetic
194 MĀṢA *Sū* 2, 28 etc *Syn* Kuruvinda	Black gram plant *Phaseolus mungo* Linn	As ingredient of gruel decoctions, medicinal oil etc (internal)	Suppurations rheumatism etc as an aid to prolongation of youth
195 MĀṢAPARṆĪ *Sū* 4, 9 etc. *Syn* Vajramulī Māṣaparṇikā, Ṛṣyaprokta	*Teramnus labialis* Spreng	Cooked as food, the paste as ingredient of prescriptions (internal)	Fever rheumatic conditions, for longevity
196 MASŪRA *Sū* 27, 28 etc *Syn* Masuraka	*Lens esculenta* Moench	Cooked as food or as ingredient of prescriptions (internal)	Griping pain haemothermia spleen diseases etc

197 MATSYĀKṢAKA *Ci* **1/3** 24	*Alternanthera sessilis* R. Br	The entire plant used in prescriptions (external and internal)	As an aid to memory intelligence and bright complexion
198 MĀTULUṄGA *Su* **4**, 10, etc.	Pomelo tree *Citrus decumana* Linn	The tendrils of the flowers used internally	Nausea anaemia, colic pain, jaundice suppurated conditions, etc
199 MEDĀ *Su* **4**, 9/1, etc	*Litsaea sebifera* Pers	The sap or a decoction of the bark, used in prescriptions (internal)	Dysentery diarrhoea, rheumatism, as promotor of longevity
200 MEṢAŚṚṄGĪ *Ci* **3**, 267, etc. *Syn* Meṣaviṣaṇika, Mesavalli	Indian screw tree *Helicteres isora* Linn	A decoction of the leaves used in prescriptions (internal)	Fever
201. MṚGALIṆḌIKĀ *Su* **25**, 49	Chinese gooseberry tree *Averrhoa carambola* Linn	The fruits fermented to a beer like liquor	Insomnia depression, anorexia, etc
202 MUDGA *Su* **21**, 25	Green gram *Phaseolus radiatus* Linn. or *P aurea* Prain or *P sublobatus* Roxb	Used as a pulse in diet	Excessive obesity urinary diseases, etc as a nourishing food
203 MUDGAPARṆĪ *Ci* **7**, 123, etc *Syn.* Mudgaparṇinī	*Phaeseolus trilobus* Ait	As above	Dermatosis rheumatic conditions, etc for longevity
204 MUKULAKA *Su* **7**, 123, etc	Edible pine tree *Pinus gerardiana* Wall	The plant used in decoctions (internal)	Suppurated swellings urinary diseases etc
205 MŪLAKA *Su* **27**, 169, etc *Syn* Mahakanda	Garden radish *Raphanus sativus* Linn	The tender tubers taken cooked or used in prescriptions (external and internal)	Discordance of the three humors (tranquilizer) skin diseases, oedema alcoholism etc
206 MUÑJĀTAKA *Ci* **22**, 30, etc	Salep or salem plant *Eulophia camestris* Wall	The juice of the roots used alone, in prescriptions and in enema (internal and external)	Morbid thirst leucorrhoea irregular fever etc , as aphrodisiac
207 MŪRVĀ *Sū* **11**, 11, etc *Syn.* Murvī, Guḍuci	*Sansevieria roxburghia* Schott	The dried flowers and leaves used in prescriptions (internal)	Fever vomiting cough etc as appetizer
208 MUṢKAKA *Ci* **15**, 189, etc	Parula tree *Stereospermum sauvolens* De	The alkaline ash of the leaves and bark used in prescriptions	Anaemia piles all types of throat affections
209 MUSTĀ *Su* **3**, 5, etc. *Syn* Musta, Mustaka	Nut grass *Cyperus rotundus* Linn	The grass dried powdered and soaked in ox bile used in prescriptions (internal and external)	Obstinate skin diseases, wounds paralytic conditions urinary diseases etc
210 NĀḌĪ *Su* **27**, 97	*Ipomoea aquatica* Forsk	Cooked as pot herb	As digestive and regulator of bile secretion
211 NĀGABALĀ *Ci* **1/1**, 45, etc *Syn* Kṣaragandhā	Gingo-fruit tree *Sida spinosa* Linn	A decoction of the dried roots used in prescriptions (internal)	Seminal weakness, general debility, chest affections etc

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd.)

Name in Caraka, reference, and synonyms if any	Modern and botanical names	Mode of use	Medical uses in
212 NĀGARAṄGA *Sū* 27, 156	Orange tree *Citrus aurantium* Linn	The fruits used alone	As cordial and digestive
213 NALA *Ci* 4, 103, etc	Nodding reed *Phragmites karka* Trin	A decoction of the reeds used in *prescriptions* (*internal* and external)	Haemothermia, fever, herpes, erysipelas, etc
214 NALIKĀ *Ci* 28, 152	Hairy onosma tree *Onosma echoides* Linn	The buds used as ingredient of medicinal oil (internal)	Cough, consumption, sallow complexion, pectoral lesions, etc
215 NANDITAKA *Vi* 8, 140	Oval leaved fig tree *Ficus retusa* Linn	The dried fruits as ingredient of prescriptions (internal)	Imbalance of the humors (tranquilizer)
216 NAVAMALLIKĀ *Ci* 26, 184	Jasmine *Jasminum sambac* Ait	The petals and leaves as ingredients of nasal medication	Affections of the head
217 NĪVĀRA *Ci* 4, 36, etc *Syn* Muṇḍadhānya, Tṛṇadhānya	Wild rice plant *Hygroryza aristata* Ness	The cereal used as food	Haemothermia
218. NICULA *Sū* 2, 10, etc. *Syn.* Hijala, Dhātriphala	Hizal tree *Barringtonia acutangula* Gaertn	The fruits and leaves used in alkaline decoction or paste in prescriptions (internal)	Abdominal and splenic disorders, jaundice etc., as purgative
219 NIKOCAKA *Sū* 27, 157	Levantine pistachio-nut tree *Pistacia vera* Linn	The dried and shelled nuts used as diet	Anaemia, wasting diseases, as roborant and aphrodisiac
220 NĪLIKĀ *Ci* 26, 12, etc *Syn* Nīlī	Indigo plant *Indigofera tinctoria* Linn	The leaves as ingredient of rectal suppository or enema	Retention of urine, flatus, acute constipation
221 NIMBA *Sū* 3, 3 etc *Syn* Nimbaka, Sutiktaka	Margosa tree *Azadirachta indica* Juss.	Paste or decoction of all parts of the plant, used in prescriptions (external and internal)	Skin diseases, urinary diseases fever, and a large number of other ailments
222 NIRGUṆḌĪ *Sū* 4, 11 etc *Syn* Nīlanirguṇḍī Sinduvāra	Chaste tree *Vitex negundo* Linn	Paste of the tubers and leaves used in prescriptions (external)	Neuralgic pain in the supraclavical region, sinus fistula, scabies, etc.
223 NIṢPĀVA *Sū* 27, 100, etc *Syn* Śimbī	Goa bean plant *Dolichos lablab* Linn	The seeds cooked as vegetable	Irregular bowel movements
224 PADMAKA *Sū* 3, 24, etc *Syn* Padmagandhi	Bird cherry *Prunus puddum* Roxb	The root stalks or the fruits used in prescriptions (external and internal)	Headache, fever, cough, rheumatic conditions etc

225 PALĀNḌU *Sū* **27**, 175, etc *Syn* Raktakanda	Onion plant *Allium cepa* Linn	The tubers and the stalks in vegetable salad and soups, or taken alone	Hemorrhage, scanty stools, cough, hiccup, etc, as appetizer and aphrodisiac
226 PĀLAṄGKYA *Su* **27**, 100	Indian spinach *Spinacea oleracea* Linn	The plant cooked as pot-herb	Irregular bowel movements
227 PALĀŚA *Su* **2**, 13, etc *Syn* Kimsuka	Bengal kino tree *Butea frondosa* Roxb	The juice of the roots, bark, leaves, etc in external ointments and ingredient of medicinal ghee	Acute constipation, colic, dysuria, skin diseases, etc
228 PANASA *Su* **27**, 143 etc *Syn* Kaṇṭiphala	Jack fruit tree *Artocarpus integrifolia* Linn	The fully ripe fruits as diet	Intestinal astringent
229 PARPAṬAKA *Su* **27**, 97 etc *Syn* Baratikta Pamsuparyaya Parpaṭa	Trailing rungia *Rangia repens* Neus	Decoction of the leaves, used in prescriptions (internal)	Fever, haemothermia, diarrhoea, etc
230 PARUṢAKA *Su* **4**, 13 etc *Syn* Parusa	Asiatic grewia *Grewia asiatica* Linn	The fruits used alone or in prescriptions decoction of the leaves roots or bark used internally	Fever, acute alcoholism, spleen diseases, cough, rheumatism, etc, as purgative
231 PĀSĀNAMEDĀ *Su* **4**, 15, etc *Syn* Śilāmeda, Pasanabhedaka Pasāṇabhedī	Indian rock foil *Coleus amboinicus* Lour	The dried and powdered leaves with cow's urine (internal)	Urinary stones, as diuretic
232 PAṬALA *Su* **2**, 11, etc *Syn* Paṭali	Trumpet flower tree *Stereospermum chelonoides* De	The decoction or paste of flowers and leaves, used in prescriptions (internal)	Constipation, fever toxic conditions, etc
233 PĀTHĀ *Ci* **3**, 204, etc *Syn* Ekastila, Kucelā, Vṛttaparni	*Stephania hernadofolia* Walp	The roots and leaves used in prescriptions (internal)	Fever, urinary disorders, consumption, piles, etc
234 PAṬOLA *Su.* **3**, 8, etc	Wild snake gourd, or pulbul plant *Trichosanthes dioeca* Roxb	Decoction of the leaves used internally the gourds cooked as vegetable	Pruritus, pimples, all types of fever diarrhoea etc as appetizer
235 PATRA *Su* **3**, 29 etc	Cinnamon tree *Cinnamonum tamala* Fr Nees	The dried leaves and bark used in prescriptions (external and internal)	Body odour, fever anaemia, cardiac disorders etc, as an aid to rejuvenation
236 PATTURA *Su* **27**, 100, etc	Coxcomb tree *Celosia argentea* Linn	A decoction of the seeds, used in prescriptions, the plant cooked as pot herb (internal)	Dysuria fever, habitual constipation, etc
237 PAYASYĀ *Su* **4**, 9, etc	White yam *Ipomoea paniculata* R Br	Used as vegetable	Emaciation, debility, loss of voice, etc, as an aid to rejuvenation
238 PHALGU *Su* **27**, 128 etc *Syn* Manjula	*Ficus carica* Linn	A paste of the figs in prescriptions, also cooked as vegetable	Emaciation and debility, urinary stone

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd.)

Name in Caraka, reference, and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
239 PHENILĀ Ci 29, 110 *Syn* Ariṣṭā	Soap nut tree *Sapindus trifoliatus* Linn or *S. mukorossi* Gaertn	A decoction of seeds and fruits used in prescriptions (internal)	Fever, rheumatism
240 PHAÑJĪ Sū 27, 98	Bind weed *Rivea ornata* Chois	Cooked as pot herb	As an aid to elimination
241 PĪLU *Sū.* 2, 4 etc *Syn.* Pīluka	Tooth brush tree *Salvadora persica* Linn	The fruits used alone or in prescriptions (internal)	Rhinitis, fainting, hemicrania, etc, as *purgative*
242 PIPPALĪ *Sū* 2, 3, etc *Syn.* Māgadhī, Vaidehī	Long pepper plant *Piper longum* Linn	The dried flowers, fruits and roots used as ingredients of prescriptions, also as spice in cooking	Used in a large number of diseases, as digestive
243 PLAKṢA *Sū* 4, 15, etc *Syn.* Karparī, Pitana	Yellow barked fig tree *Ficus infectoria* Roxb.	A decoction of the tender leaves, used in prescriptions (internal)	Diarrhoea, haemothermia, seminal weakness, etc
244 PRĀCĪNĀMALAKA *Sū* 27, 146	Indian prune *Flacourtia cataphracta* Roxb	The fruits used alone	After effects of poisoning
245 PRAVĀLAJĀTI *Ci* 3, 207, etc	Chameli tree *Jasminum grandiflorum* Linn	The sprouts or dried flowers used in prescriptions (external)	Coryza nasal haemorrhage, fever, dermatosis, etc
246 PRIYĀLA *Sū* 3, 21, etc *Syn* Priyālaka Rājātana	Buchanon's mango *Buchanania latifolia* Roxb	The fruits used alone the expressed oil in prescriptions (external)	Rheumatism urticaria, fever, morbid thirst, etc
247 PRIYANGU *Sū* 4, 15 etc *Syn* Priyaka, Priyā	Perfumed cherry *Aglaia roxburghiana* Miq	The fruits used alone the seeds used as cereal	Fever, haemothermia, dermatosis, piles, ear-ache, etc, as intestinal *astringent*
248 PṚŚNIPARṆĪ *Sū* 2, 11, etc *Syn* Pṛthakparṇī, Siṃhapuṣpī	Pointed leaved uraria plant *Uraria lagopoides* Dc	The *entire plant* used *in* prescriptions (internal)	Misperistalsis, diarrhoea, fever, cough, consumption, etc
249 PṚTHVĪKĀ *Sū* 5, 20, etc *Syn* Bṛhadelā, Pṛthvī, Elā, Aindrī, Indrāṇī Sthūlailā	Greater cardamom *Amomum subulatum* Roxb	The dried fruits used alone or in prescriptions (internal)	Hemicrania rhinitis, fever, skin eruptions, etc
250 PŪGA *Sū* 5, 77	Betel nut tree *Areca catechu* Linn	The dried *nuts used alone*	Halitosis, loss of appetite

251 PUNARNAVĀ *Su* 2, 12 etc *Syn* Švetamula Šveta punarnava Vṛścira Tāmalakya	P g weed or Hog weed *Boerhaav a repens* Linn (Variet es *B d ffu e* & *B procumbens*)	A decoction of tl e leaves and roots used in prescript ons (internal)	Constipat on sk n diseases oedema urinary d seases as an aid to rejuvenation
252 RĀJĀDANA *Ci* 30, 97	Ind an ape flower tree *M musops hexandra* Roxb	Paste of the leaves and fruits used in med cated ghee	Menstrual d sorders
253 RAKTACANDANA *Ci* 30, 92	Red sandal wood tree *Pterocarspus santalinus* Linn	A decoction of the leaves or the powdered bark used internally	Bleeding p les diarrhoea morb d *menstrual d scharges*
254 RĀSNĀ *Su* 3, 22 etc *Syn* Nākuli Gandhanakuli Rasanā	Indian groundsel *Vanda roxburghii* Br	Paste *of the roots and rh zomes* used in prescriptions (internal and external)	Rheumatic conditions chest pains, fever oedema heart diseases etc
255 ROHINI *Su* 4, 10 etc *Syn* Vivasa Patranga	Ind an red wood tree *Soym da feb fuga* Juss	Decoction of the bark used in prescriptions (internal and ex ternal)	Debil ty chronic skin diseases as a purifier for breast milk
256 ROHISA *Ci* 3, 267 etc	Geranium grass *Andropogon schoenanthus* Linn	A decoction of the grass and roots used in prescript ons (internal)	Fever abdominal diseases splenic disorders jaundice etc
257 ROHITAKA *Ci* 16, 81 etc *Syn* Sadapuspa Śalmalika	Wh te cedar *Amoora rohitaka* W & A	The powdered bark, used in decoction as ingred ent of medi cinal ghee etc	Ur nary d sorders enlarged spleen jaundice anaem a intestinal worms etc
258 RUHA *Ci* 23, 80 etc *Syn* Vrksaruha Šekhara N lavalli	Wild orch d *Loranthus falcatus* Linn	A *decoction of the leaves used in* prescr ptions (nternal)	*Cataract night blindness tumours* scab es etc
259 ŚAILEYAKA *Ci* 3 267 etc *Syn* Śa leya Ś ladadru Śa laka	Lichen *Permel a parlata* Esche	In prescript ons (external and internal)	Fever toxicos s d sorder of the first humor
260 ŚAIREYA *Su* 14, 32	Yellow na l dye plant *Barle a pr on tis* Linn	Paste of the leaves as ingredient of hot poultices and steam bath	Stiffness of l mbs enlargement of scrotum sciatica etc
261 ŚAIVALA *Ci* 4, 103 etc *Syn* Jalaja	Moss *Vall si er a sp ralis* Linn	In prescr ptions (external and internal)	Haemothermia giddiness morbid th rst rheumatism
262 ŚĀLA *Su* 4, 18 etc *Syn* Sarja Sarjarasa Sarjaka Dirgha śākha Aśvakarna	Sal tree *Shorea robusta* Gaertn	Decoction of the res n and leaves used internally	Urinary disorders pectoral lesions seminal weakness as sedat ve
263 ŚĀLEYA *Ci* 4, 75	Common fennel or sweet fennel *Foen culum vulgare* Gaertn or *Trigonella foenum graecum* Linn	Tl e bark made into paste w th sandal wood and used externally or internally	Bronchial asthma

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka, reference and synonyms if any	Modern and botanical names	Mode of use	Medicinal uses in
264 ŚĀLAPARṆĪ *Sū* 2 11, etc *Syn* Triparṇī, Sthira, Dirghamūla, Vidarigandha	Tick trefoil *Desmodium gangeticum* Dc	Decoction of the leaves, used in prescriptions (internal)	Constipation, diarrhoea, oedema, fever, etc
265 ŚALLAKĪ *Sū* 4, 15, etc *Syn* Kuntarika, Rasāla	Indian olibanum *Bosuellia serrata* Roxb	A paste or decoction of the bark alone or soaked in ghee (internal)	Cough, hiccup, nausea, etc
266 ŚĀLMALĪ *Sū* 27, 99, etc *Syn* Kukkuṭī, Nirgandhapuṣpī Raktapuṣpaka, Moca	Red silk cotton tree *Bombax malabaricum* Dc	The fresh flowers or resin used (internal and external)	Haemothermia, dysentery, rectal prolapse, etc
267 SAMAṄGĀ *Ci* 4, 76, etc. *Syn* Śamīpatra, Prasāriṇī, Saṃkocinī	Sensitive plant *Mimosa pudica* Linn	Paste or decoction in prescriptions (external and internal)	Haemothermia, piles, diarrhoea, etc
268 ŚAMĪ *Sū* 25, 49 etc *Syn* Maṅgalya, Śiva, Supatrā, Śaṅkuphalikā	*Prosopis spicigera* Linn	The fruits and bark used in decoction (internal)	As intestinal astringent
269 ŚANA *Sū* 27, 99, etc *Syn* Kaṭutikta, Tvaksāra	Bengal hemp plant *Crotalaria juncea* Linn	The leaves cooked as vegetable, a decoction of the flowers and roots, used in prescriptions (internal)	Dysentery, irregular bowel movements
270 ŚAṄKHAPUṢPĪ *Ci* 1/1, 58 etc *Syn* · Medhya, Kiriti, Śaṅkhyakusumā, Śitapuṣpī	Dankuni plant *Canscora decussata* Roem	The leaves used in prescriptions (internal)	Cough, rheumatic conditions, etc
271. ŚAṄKHINĪ *Sū* 1 81, etc *Syn* Tiktala, Akṣipīḍaka, Yavatiktā	*Ctenolepis cerasiformis* H & K	Decoction of the fruits as ingredient of prescriptions and enema (internal and external)	Disorders of assimilation, as purgative and roborant
272 SAPTAPARṆA *Sū* 3 4, etc *Syn* Śāradā, Devavṛkṣa, Madagandhā	Dita *Alstonia scholaris* R Br	A paste of the bark, used in ointments	Chronic skin diseases, urinary diseases, oedema, etc
273 SARALA *Ci* 3, 267, etc	Himalayan pine tree *Pinus longifolia* Roxb	A decoction of the leaves and bark, used in prescriptions (internal)	Fever, loss of appetite, facial paralysis, etc
274 SĀRIVA *Sū* 4, 10, etc *Syn* Nāgajihvā, Anantā, Anantamūlā	Indian sarsaparila *Hemidesmus indicus* Br	The leaves used alone in decoction (internal)	Sallow complexion, loss of voice, dysentery, cough, menstrual disorders, etc
275. SARṢAPA *Sū* 2 3, etc *Syn* Rājakṣavaka, Kaṭṭaka	Rape plant *Brassica campestris* Linn (Varieties—*B sarson*, *B juncea*, *B napus*)	The powdered seeds or the expressed oil used alone or in prescriptions or in suppositories (external and internal)	Rhinitis hemicrania, pruritus, dysuria, coryza, acute intestinal gas formation, etc

276 ŚATAKUSUMA *Ci* 12 16	*Peucedanum graveolens* Benth	Extract of the plant as ingredient of enema	Inguinal swelling colic pain menorrhagia piles etc
277 SĀTALĀ *Ci* 13 128	*Acacia concinna* DC	The roots used in prescriptions (internal)	Abdominal diseases poisoning hardened spleen oedema *jaundice etc*
278 SIGRA *Sū* 3 8 etc *Syn* Śobhāñjana Sigru Haritaśāka Raktaka	Drum-stick plant *Moringa pterygosperma* Gaertn	The powdered bark root and dried sap used in prescriptions or in steaming mixtures (internal and external)	Anosmia fainting chronic skin eruptions painful piles etc
279 SIMBITAKA *Sū* 17 142	Apple tree *Pyrus malus* Linn	The fruit used alone	As intestinal astringent
280 ŚIMŚAPA *Su* 1 2 12 etc *Syn* Kṛṣnaśiṃśapa	Rose wood tree *Dalbergia sissoo* Roxb	The expressed juice of the leaves or tender bark used in prescriptions (internal	Senility debility
281 ŚIRĪṢA *Su* 2 5 etc	Sirisa tree *Albizzia lebbek* Benth	Powdered seeds bark and leaves used alone or in prescriptions (external and internal)	Hemicrania urinary anomalies chronic skin diseases toxic conditions etc
282 ŚLEṢMĀTAKA *Sū* 4 11 etc *Syn* Bhukarvudā a Uddālaka Selu	Assyrian plum *Cordia myxa* Roxb or *C obliqua* Willd	The bark made into ointment for local application	Poisoning for purification of breast milk
283 SOMARĀJĪ *Su* 2 24 etc *Syn* Soma ali Somavallikā Soma Candri	Babchi tree *Psoralea corylifolia* Linn	The seeds cooked in gruel or used in prescriptions (internal	Toxicosis night blindness tumour cataract
284 SPṚKKA *C* 12 66 etc *Syn* Kuṭila Devaputrika Kuṭika Nakha p spī	Mel lot plant *Melilotus indica* All	The pulverized seeds as ingredient of pills	Fever emaciation obstructed and difficult labour
285 ŚṚṄGĀṬAKA *C* 2 2 14 etc *Syn* Śṛṅgamula Trikoṭa Śṛṅgata	Indian water chestnut *Trapa bispinosa* Roxb	The shelled nuts taken alone or in prescriptions (internal)	Impotency chest pain loss of voice urinary disorders etc
286 STHAUṆEYAKA *C* 3, 267 etc	Glory tree *Clerodendron infortunatum* Linn	A decoction of the bark used internally	Fever as an emetic
287 SUDHĀ *C* 5, 107 etc *Syn* Snuk Guḍa Nanda Nistriṃśapatraka	Thorny milk hedge or dulk hedge *Euphorbia neriifolia* Linn	The milky juice used in prescriptions (internal)	Oedema piles gastro-intestinal irritations etc
288 SŪKARĪ *Ci* 9, 46	*Tacca pinnatifida* Fors or *T integrifolia* Ker	Starch from the tubers used in medicinal jelly	Epileptic fits insanity
289 SUNISAṆṆAKA *C* 18, 81 etc *Syn* Sūmāra Sitāvarī Parnaka Svastika	Marsilea *Marsilea quadrifolia* Fgar	*The sprouts cooked as vegetable*	*Cough* spastic condition of the leg muscles etc

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka reference, and synonyms if any	Modern and botanical names	Mode of use	Medical uses in
290. SURASA *Sū* 3, 8, etc *Syn* Tulasī Bhūtaghni Kuṭeraka, Suravallī Sulabha, Mañjarikā	Holy basil plant *Ocimum sanctum* Linn	A paste or extract of the leaves, used in prescriptions (internal)	Skin eruptions, fever, splenic disorders, toxicosis, paralysis, etc
291 TĀḌAKA *Sū* 25, 49	Palmyra palm *Berassus flabellifer* Linn	Various parts fermented into beer-like liquor	Insomnia, depression, anorexia
292 TAGARA *Ci* 6, 27, etc *Syn* Kuṭilla, Kālānusārivā, Dīpana, Śaṭha	Indian valerian *Valariana hardwickii* Wall	A decoction of the roots used in prescriptions (internal)	Fever, urinary diseases, poisonous bites, etc
293 TĀLAMŪLĪ *Ci* 17, 75	Black musali plant *Curculigo orchioides* Gaertn	The powdered roots as ingredient of smoking mixture	Cough
294 TĀLISA *Ci* 8, 145, etc *Syn* Karicchadā Tālīśapatraka, Tāmalakīpatra	Silver fir tree *Abies webbiana* Lindl	The powdered leaves used in prescriptions (internal)	Cough, anaemia, digestive dis orders, colic pain, etc
295 TAMĀLA *Ci* 3, 267, etc. *Syn* Gomedaka, Rāma, Tamālaka, Sukumāraka	Mysore gamboge tree *Garcinia xanthochymus* Hook	A decoction of the fruits and seeds, used in prescriptions (internal)	Skin eruptions, toxic conditions, etc
296 TĀMALAKĪ *Ci* 5, 119, etc *Syn* Viśvaparnī, Bahuphalā, Uncaṭa, Tāmalikā, Cāraṭī	Feather foil plant *Phyllanthus niruri* Linn	A decoction of the plant, used in prescriptions (internal)	Blood poisoning, jaundice herpes etc
297 TĀMBŪLA *Sū* 5, 77, etc *Syn* Bhujangalatā, Nāgavallī, Nāginī, Tāmbulavallī	Betel leaf plant *Piper betel* Linn	The leaves chewed along with betel nut, cloves etc	Halitosis
298 TAṆḌULA *Ci* 4, 73, etc. *Syn* Akṣata	Rice plant *Oryza sativa* Linn	Cereal food, ingredient of gruel, sweetmeat, etc	As vitalizer and roborant
299 TAṆḌULĪYAKA *Ci* 23 198, etc *Syn* Bahuvīryā Kaṇḍerā, Viṣaghna, Mūṣaka	Prickly amaranth *Amaranthus polygamus* Will	The entire plant cooked as vegetable, also as ingredient of enema	Intoxication toxic conditions, internal haemorrhage
300 TAṄKA *Sū* 27, 136	Pear tree *Pyrus communis* Linn	The fruit used alone	As intestinal astringent
301. TARUṆĪ *Si* 10 31 *Syn* Devakeśara, Bhṛṅgavallabha, Suvṛtta	Cabbage rose *Rosa centifolia* Linn	The petals as ingredient of enema	As above

302 TILA Su 3, 14, etc Syn Snehaphala	Sesame plant *Sesamum indicum* Linn	The expressed oil from seeds or alkaline ash used in prescriptions (external and internal)	Skin eruptions, pain in vagina, acute constipation, chest complaints, etc
303 TILAPARNI Ci 3, 267, etc.	*Gynandrodropsis pentaphylla* Dc	The entire plant and roots used in prescriptions (internal)	Fever
304 TINDUKA Sū 25, 40, etc Syn Nilasāra Tinduka	False mangosteen *Diospyros embryopteris* Pers.	The fruits used alone	Urticaria phlegm excessive bile secretion piles, etc
305 TINISA Ci 1/2 12 etc Syn Citrakṛt Śakaṭa	Chariot tree *Ougeinia dabbergioide* Benth	The freshly-expressed juice of the bark and stalks used in prescriptions (internal)	Fever debility, as a vitalizer
306 TRAYAMĀNA Ci 3, 208 etc Syn Devabalā Girijā Girija Trayamāṇika	Zalil plant *Delphinium zalil* Aitch	Decoction of the plant used in prescriptions (internal)	Rigor high body temperature, splenic disorders, chronic skin diseases etc
307 TṚṆAŚŪNYA Su 27, 145 etc Syn Laghupuṣpa Haimi Chinnaruha	Screw pine *Pandanus suberifolium* Linn	The flowers used in decoctions	As antitoxic and febrifuge
308 TRVRTA Su 4, 13	Turpeth plant *Operculina turpethum* Manso	The flowers and bark used in prescriptions and as ingredient of enema (external and internal)	Skin eruptions, suppurated wounds fractures, etc, as laxative
309 TUDA Su 27, 135	Indian mulberry tree *Morinda citrifolia* Linn	A decoction of the roots used in prescriptions (internal)	As liver tonic
310 TUMBI Ci 26 15 etc Syn Ikṣvāku Alāvu Phalini Piṇḍaphala	Bottle gourd *Lagenaria vulgaris* Seringe	Infusion of the sprouts fruits and seeds in milk used as emetic	Cough, vomiting tachycardia, poisoning etc
311 TURUṢKA Ci 28, 153	Storax plant *Altingia excelsa* Noronha	Liquid exudate as ingredient of medicinal oil (internal)	Cough consumption, debility pectoral lesions etc
312 TUVARA Ci 30, 124	*Avicennia officinalis* Linn	A paste of the seeds for local application	Offensive smell from the vaginal passage
313 TVAC Sū 3, 28	Cinnamon (bark) *Cinnamomum zeylanicum* Bl	The powdered bark used alone or in prescriptions (internal and external)	Rigor ear ache, eye-ache, discharge from the ear, etc
314 UDAKĪRYAKA Sū 2, 9	Prickly weed climber *Caesalpinia digyna* Rottl	A decoction of the root, used internally or in enema	Accumulation of morbid matter in the colon, as purgative
315 UDUMBARA Sū 5 22, etc Syn. Hemadugdhi Kṣiravṛkṣa Krmikanṭa	Cluster fig tree *Ficus glomerata* Roxb	The powdered root bark used for smoking or as ingredient of prescriptions (internal)	Eye ache ear ache, dental pain, suppurated conditions etc
316 USGATAKA Si 12, 18/7	Blaffaris plant *Blepharis edulis* Pers	Infusion of the plant in milk used in nutritive enema	Sexual debility

TABLE 3

Medicinal Plants and Plant Products and their Uses—(Contd)

Name in Caraka reference, and synonyms if any	Modern and botanical names	Mode of use	Medicinal use, in
317 UPAKUÑCIKĀ *Ci* 13, 125, etc *Syn* Kṛṣnajīraka, Bhedinī, Bahugandhā	Small fennel plant *Nigella sativa* Linn	The powdered seeds used in prescriptions (internal)	Acute *constipation, colic pain,* anal fistula, poisonous bites, etc.
318 UPODIKĀ *Sū* 2, 33, etc *Syn* Viśālā, Madāśaka, Upodakī	Malabar spinach *Basella rubra* Linn	As pot herb or as an ingredient of gruel	Intoxication, diarrhoea, rheumatic conditions, etc
319 UŚĪRA *Sū* 4, 10 etc *Syn* Bahumulaka Indragupta, Sugandhimūla, Jaṭāmeda	Cuscus grass *Andropogon squarrosus* Linn	The powdered leaves or an infusion used in prescriptions (external and *internal*)	Senility, debility, fever, chronic skin diseases, toxicosis, piles, suppurated conditions, etc
320 UTPALA *Sū* 4 15, etc *Syn* Nīlapatraka, Utpalaka	Blue water lily *Nymphaea stellata* Willd or *N Cyanea* Roxb	The stalks, petals and seeds used in prescriptions (internal and external)	As above
321 VACĀ *Sū* 2, 9, etc *Syn* Ugragandhā, Jaṭilā, Vijayā, Bhadrā, Ikṣupatrikā	Sweet flag plant *Acorus calamus* Linn	The leaves and stalks in powder form or decoction used in prescriptions (*internal*)	Skin diseases, haemorrhage, fever, urinary diseases, etc , as purgative, appetizer and vitalizer
*322 BĀLAKA *Ci* 17, 124, etc	Fragrant mallow plant *Pavonia odorata* Willd	A decoction of the root bark as ingredient of *medicinal syrup or* sweetened infusion	Asthma, hiccup, acute nausea, *toxicosis*, etc
323 VAMŚA *Ci* 21 125 etc *Syn* Veṇu, Tṛṇadhvaja, Durarūhā, Tvakṣāra	Spiny bamboo *Bambusa arundinacea* Retz	A paste or decoction of the leaves or seeds used in prescriptions (external and internal)	Acute *suppurated conditions,* poisonous bites, intestinal worms, excessive fat, etc
324 VAÑJULA *Sū* 4, 18, etc	Country willow *Salix tetrasperma* Roxb	The leaves used in infusion internally, or in enema	Excessive bile secretion, as sedative
325 VARAKA *Sū* 27, 14, etc *Syn* Rukṣa, Sthulaphiraṅgaka	Millet *Panicum miliaceum* Linn	Cooked as cereal	As intestinal astringent and tranquilizer
326 VARTAKA *Sū* 27, 162, etc *Syn* Citraphala, Kaṇṭakinī, Kalphala, Vārtāku, Hiṅgulī	Brinjal plant *Solanum melongena* Linn	Cooked as vegetable	Indigestion, anaemia, cough, etc
327 VARUNA *Ci* 3, 267, etc *Syn* Kumāraka, Asmaghna	Sacred caper tree *Crataeva religiosa* Forst	The sprouts and leaves, in decoction, used in prescriptions (external and internal)	Assimilation disorders, piles, etc

TABLE 4

Medicinal Substances of Mineral Origin and their Uses

Name and reference	Modern equivalent	Mode of use or application	Medicinal uses in
1 ADRIJATU *Ci* 16, 78 *Syn* AŚMAJATU *Ci* 12, 49 16, 81 GIRIJA *Ci* 1/3, 64 21, 130, etc ŚILĀJATU *Sū* 21, 24 etc ŚILODBHEDA *Ci* 15, 113, 30, 90	Mineral bitumen (exudate from ores)	(*a*) Internal—in linctus (*b*) Internal—in decoction (*c*) Internal—in powder mixture (*d*) Internal—taken alone (*e*) Internal—taken mixed with finely powdered diamond and plant juices	(*a*) Anaemia, oedema, jaundice, urinary diseases, excessive menstrual flow, fever, consumption, *emaciation, etc* (*b*) Obesity, imbalance of the body humours, debility, etc (*c*) Hard cutaneous *eruptions*, enlarged spleen (*d*) Intoxication, fainting (*e*) Malignant skin diseases, as a general remedy *for* all bodily ailments
2 AGĀRADHŪMA *Ci* 23, 41, *Si* 7, 24, 25, 9, 78 *Syn* GṚHADHŪMA *Sū* 3, 5 VEŚMADHŪMA *Ci* 23, 14	Soot from kitchen smoke	(*a*) External—in ointment (*b*) *External—as rubbing powder* (*c*) Ingredient of rectal suppositories (*d*) Internal—in linctus (*e*) *Internal—in mixture*	(*a*) Chronic skin diseases, poisonous bites (*b*) For extracting venom from poisonous bites (*c*) Flatulence, constipation, re tention of urine (*d*) Throat affections (*e*) Poisoning
3 AGRYALAVANA *Ci* 23, 96 *Syn* SAINDHAVA *Sū* 1 88, 5, 12, etc. *Vi* 8, 141 *Śa* 8, 34, etc, *Ci* 1/1, 25, 2/4, 11, etc	Rock salt	(*a*) *External—used in many different* modes of application (*b*) Internal—used in many types of prescriptions	(*a*) & (*b*) For a very large number of pathological conditions and as a general tonic
4 ĀLA *Sū* 1, 70 3, 5, etc, *Ci* 9, 66, 18, 69, etc *Syn* HARITĀLA *Sū* 5, 26 *Ci* 7, 114, 26, 196	Yellow orpiment (arsenious sulphide)	(*a*) Ingredient of *medicinal cigars* (*b*) External—in medicated oil (*c*) External—ingredient of oral gargle	(*a*) Imbalance of the first and third humors (*b*) Parasitic infections of the skin, eruptions and itchings (*c*) Mouth and throat diseases
5 AMṚTĀSANGA *Ci* 7, 114 *Syn* TUTTHA *Sū* 3, 12 *Ci* 7, 114, *etc*	Blue vitriol (copper sulphate)	(*a*) External—in dusting powder (*b*) External—in ointment	(*a*) Ringworm, scabies, herpes, etc (*b*) Exanthema, cutaneous eruptions, eye affections, piles, eczema etc
6 AÑJANA *Sū* 1, 70, 3, 5 *Syn* SAUVĪRĀÑJANA *Sū* 5, 15	Black sulphide of antimony	(*a*) External—in ointment	Leucoderma *fistula* piles, dimness of vision eye-diseases, etc

7 ANŪPALAVANA *Vi* 8, 141	Salt obtained by evaporations of well-water	Ingredient of rectal enema	As purgative
8 AŚMAMAYĪ ŚILĀ *Su* 14, 26, 47, 58, *Śa* 8, 34, 42, *In* 12, 20 *Ci* 1/3, 63, 5, 17, etc	Slab of stone	Used for hot fomentation (covered with silk, cotton etc)	Hard cutaneous swellings, abscess, varicocele, etc
9 AYAS *Ci* 21, 131	Iron	Used for hot compress or fomentation	Hard cutaneous swellings, varicocele
10 ĀYASA *Su* 1, 131, 21, 23, *Śā* 8, 34, *Ci* 7, 88, 12, 21, etc *Syn* KĀLALOHARAJAS *Su* 21, 23, *Ci* 7, 171 KRṢṆĀYASA *Ci* 1/2, 49 KĀLĀYASARAJAS *Ci* 1/1, 58	Finely powdered iron or specially prepared iron	(*a*) External—in dusting powder (*b*) External—ingredient of poultice (*c*) External—in ointment (*d*) External—in hair-lotion (*e*) Internal—used in prescription after prolonged contact with cow s urine (*f*) Internal—in linctus (*g*) Internal—in (acid) liquid mixture (*h*) Internal—in pills	(*a*) Cutaneous eruptions (*b*) Inflammation (*c*) Blindness, unseparated eyelids, tumours, piles (*d*) As hair tonic and hair dye (*e*) Leucoderma, jaundice, urinary disorders, anaemia, heart diseases, anal fistula, etc (*f*) Toxicosis, asthma, cough hiccup, etc (*g*) Obesity, flatulence, debility, etc (*h*) Disorders of chyme formation, spleen disorder, jaundice, anaemia oedema gastro intestinal irritations, lithiasis, etc
11 AYOMALA *Ci* 16, 74 *Syn* MAṆḌŪRA *Ci* 16, 95, 103	Iron rust	(*a*) Internal—in linctus (*b*) Internal—in prescription after prolonged treatment with cow s urine	(*a*) Toxic conditions with fever, spastic paraplegia epilepsy, urinary disorders, skin diseases, etc (*b*) Anaemia, dropsy, oedema, urinary disorders, jaundice, dysentery, intestinal parasites, etc
12 BĀLUKA *Vi* 8, 141	Salt from saline sand	Ingredient of rectal enema	For relief in inflammatory conditions
13 BHRṢṬALOṢṬA *Ci* 20, 30 *Syn* PAKVALOṢṬA *Ci* 4, 80, 22, 42	Lump of baked clay	Medication of drinking water by prolonged immersion	Haemothermia, biliousness
14 DVE LAVAṆE *Ci* 5, 80, 26, 12, 101	Rock salt mixed with alkaline salts	(*a*) Ingredient of rectal suppository (*b*) Internal—in powder mixture	(*a*) Acute constipation (*b*) Pain in gastric region or rectal area, piles, spleen disorders, pain after meals, throat spasms, etc
15. DVE TUTTHE *Ci* 7, 108	The two vitriols	External—in medicated oil	Itching eczema, dermatosis

TABLE 4

Medicinal Substances of Mineral Origin & their Uses—(Contd.)

Name and reference	Modern equivalent	Mode of use or application	Medicinal uses in
16. GAIRIKA *Sū* 3, 5, *Ci* 3, 73, 25, 117; 26, 210, etc	Chalk of reddish-brown colour	(a) External—in ointment (b) External—in mud pack (c) Ingredient of oral gargles (d) Internal—in liquid mixture (e) Internal—infusion in water	(a) White leprosy, depigmentation of the skin, ringworm, exanthema, piles, etc. (b) Spreading skin infections (c) Halitosis, inflammation of mouth and throat, dental caries, diseases of the gum, etc. (d) Haemothermia, bronchial asthma, bleeding nose, etc. (e) Blood dysentery, menstrual disorders, diseases of the uterus
17 GANDHAKA *Ci* 7, 71 *Syn* TELITAKA *Ci* 7, 70 SAUGANDHIKA *Sū* 3, 10, *Ci* 17, 126	Sulphur	(a) External—in dusting powder (b) Internal—in linctus (c) Internal—suspended in acid plant juices	(a) Ringworm, itches herpes, scabies (b) Asthma, cough, hiccup (c) Chronic skin diseases
18 GARAMANI *Ci* 23, 252	The 'poison' gem	External—to be kept in contact with the skin	As an antidote for poisoning
19 HEMAN *Vi* 8, 9 *Syn* SUVARNA *Sū* 1, 70, 5, 74 KANAKA *Śā* 3, 16, 8, 19, etc KĀÑCANA *Ci* 1/4, 59	Gold	(a) Material for catheters, enema tubes tongue scrapers, etc. (b) Medication of drinking water by prolonged immersion (c) Internal—ingredient of medicated ghee	(b) Haemothermia (c) As a vitalizing tonic and a panacea in all bodily ailments
20 IṢṬAKA CŪRNA *Ci* 27, 49	Brick powder	External—as powder for massage	Spastic paraplegia
21. KĀCA *Ci* 27, 125	Glass or glass like mineral	Internal—powdered and used in linctus	Hiccup, cough, asthma
22. KĀLALAVANA *Sū* 27, 303, *Vi* 8, 141, *Śā* 8, 34, *Ci* 13, 134 *Syn* · KĀLOTTHALAVANA *Ci* 15, 171	Black salt	(a) Internal—taken alone or dissolved in acid fruit juices (b) Internal—ingredient of medicated ghee	(a) As digestive, laxative and general tonic (b) Loss of appetite

23 KĀÑCANAGAIRIKA *Ci* **20**, 32 *Syn* KĀMŚRĪ *Ci.* **23**, 54 **30**, 121	Yellow ochre	(*a*) Internal—infusion with water (*b*) Internal—in piles	(*a*) Imbalance of the second and third humors (*b*) Fever, toxicos s
24 KĀMSYA *Śa* **8**, 9 *Ci* **24**, 154 *Si* **3**, **7** *Syn* RĪTI KĀMSYA *Su* **3**, **7**	Bronze or bell metal	Material for enema tubes etc	
25 KĀSĪSA *Su* **3**, 5 10 *Ci* **7**, 102 etc , **21**, 126 etc *Syn* PAUṢPĀÑJANA *Ci* **26**, 250	Green vitriol (ferrous sul phate)	(*a*) External—in ointment (*b*) External—in eye-ointment (*c*) External—in dusting powder (*d*) External—ingredient of poul tice (*e*) External—in med cated oil for local application	(*a*) Leucoderma alopecia, fistula (*b*) Gradual loss of vision (*c*) Spreading inflammation, dis-coloured skin skin diseases (*d*) Eye-d seases (*e*) Slimy discharges from the vagina, displaced or prolapsed uterus painful and congested uterus
26 KṚṢNAMṚT *Ci* **19**, 82 **22**, 44 *Syn* KṚṢNAMṚTTIKĀ *Su* **27**, 200 *Ci* **19**, 64	Black clay	Internal—in aqueous infusion	Excessive thirst haemorrhage
27 KṚṢNASIKATĀ *Ci* **22**, 44	Black sand	Medication of drinking water by prolonged immers on	Excessive thirst
28 LAVANĀNI CATVĀRI *Ci* **15**, 111	Mixture of four salts	(*a*) Internal—in p lls (*b*) Internal—as ingredient of powder	(*a*) Spleen diseases jaund ce loss of appetite emaciation etc (*b*) Cough asthma heart diseases, etc
29 LAVANA PAÑCAKA *Su.* **1**, 75 *Ci* **13**, 127 **15**, 106 etc	M xture of five salts	(*a*) Ingredient of rectal enema (*b*) External—as massaging powder (*c*) Internal— n medicinal powder (*d*) Internal—in p lls (*e*) Internal—in medicated ghee (*f*) Internal—in liquid mixture	(*a*) Const pat on (*b*) For inducing bleeding in poi sonous bites (*c*) Spleen diseases flatulence, ind gestion short breath etc (*d*) Coryza heart block (*e*) Cough consumption oedema inguinal swelling heart d sea ses etc (*f*) Dysentery anaemia gastro-intestinal irritation etc
30 LAVANATRAYA *Ci* **15**, 177, 183 **20**, 25, *Si* **9**, 18	Mixture of three salts	(*a*) Internal—in medicated ghee (*b*) Internal—in p lls (*c*) Internal—in l qu d m xture	(*a*) & (*b*) Colic pain misperistalsis, piles dysentery, etc (*c*) Tetanus convuls ons cardiac seizures

TABLE 4

Medicinal substances of Mineral Origin & their Uses—(Contd)

Name and reference	Modern equivalent	Mode of use or application	Medicinal uses in
31 LOHA *Ci* 25, 103, etc	Metal (iron)	Material for surgical instruments	-
32 LOHITAMṚT *Ci* 23, 101	Red clay	Internal—in pills	Poisoning, oedema, indigestion, intestinal worms, etc
33 MĀKṢIKA *Ci* 7, 70, 16, 76, etc Syn TĀPYA *Ci* 16, 78, 26, 250	Iron pyrites	(*a*) External—in eye ointment (*b*) Internal—in pills after prolonged immersion in cows' urine (*c*) Internal—in linctus	(*a*) Gradual loss of vision (*b*) Chronic skin diseases (*c*) Anaemia, irregular fever, urinary disorders, emaciation, toxicosis, jaundice, etc
34 MANAHŚILĀ *Sū* 1, 70, 3, 5, 5, 28, etc, *Si* 7, 117, 17, 77, etc	Realgār (arsenic sulphide)	(*a*) External—in dusting powder or in ointment (*b*) Ingredient of medicinal cigar (*c*) Internal—in linctus, pills or medicated ghee	(*a*) Chronic skin diseases, piles, leucoderma, baldness, alopecia leprosy, exanthema, etc (*b*) Migraine, hemicrania, earache, diseases of the gum, drowsiness, etc (*c*) Oedema dysentery, toxicosis, night blindness, carbuncle, etc
35 MAṆI *Sū* 1, 70, 6, 31, 8, 19, *Ni* 7, 16, *Ci* 26, 250, etc Syn RATNA *Sū* 8, 19, *In* 1/2, 33	Precious stone	External—in eye salve as fine powder	Eye diseases, failing vision
36 MAULAKA *Vi* 8, 111	Black salt	Ingredient of rectal enema	For rheumatic conditions
37 MṚT *Sū* 9, 13, 18, 6 *Śā* 1, 43, *Ci* 4, 79, 16, 121, etc	Clay	(*a*) Internal—ingredient of mixture (*b*) Internal—in aqueous suspension	(*a*) Geophagism or abnormal hankering for clay (*b*) Haemothermia
38 O(A)UDBHIDA *Sū* 1, 188, 27, 303, *Vi* 8, 141, *Ci* 15, 85 26, 227	Fossil salt	(*a*) Ingredient of rectal enema (*b*) Internal—in medicated ghee (*c*) Internal—in emulsion with oil	(*a*) Constipation (*b*) Deafness, infected ear passage, discharge of pus from ears, etc (*c*) Intestinal worms
39 PĀKYA *Ci* 15, 85, 109	Artificially prepared salt	Internal—in medicated ghee	Indigestion, dysentery, etc

40 PAṄKA *Ci* **22**, 37 *Su* **18**, 6 *Syn* PUṢKARINĪMṚT *Ci* **4**, 104	Slime	As mud pack for appl cat on to the sk n	Sunburn h gh fever etc
41 PĀMŚU *Ci* **23**, 38 174	Powdered earth (clay)	External—for local application	Po sonous b tes
42 PĀMŚUJA *Su* **27**, 304, *Vi* **8**, 141	Salt prepared from sal ne clay	Internal—in mixtures	Loss of appetite flatulence rheu matism
43 RAJATA *Vi* **8**, 9 11 *Ci* **1/1**, 58 **3**, 23 etc *Syn* RŪPYA *Su* **5**, 74 *Ci* **16**, 78 etc	Silver	(*a*) Material for fine tubes and catheters (*b*) Internal—in linctus as fine powder	(*b*) Asthma cough hiccup ema ciation loss of appet te, etc
44 ROMAKA *Vi* **8**, 141 *Ci* **15**, 85 *Syn* VIḌA *Su* **1**, 88 **27**, 302 *Śa* **8**, 34 *Ci* **5**, 69 **15**, 85 etc	Salt obta ned from sal ne soils	(*a*) Ingredient of rectal enema (*b*) External—in medicated oil (*c*) Internal—in medicated ghee (*d*) Internal—in fermented mix ture (*e*) Internal—in aqueous infusion (*f*) Internal—in powder mixtures (*g*) Internal—dissolved in acid fruit juices	(*a*) As a purgative in loss of appet te (*b*) Affections of the ear passage and of hear ng (*c*) & (*d*) Enlarged spleen pain ful movement of bowels mucus in stool general weakness, etc (*e*) Cough asthma (*f*) Hard skin nodules enlarged spleen anaemia dysentery, etc (*g*) Chronic alcoholism
45 RŪPYAŚILĀJATU *Ci* **1/3**, 58	Mineral bitumen from ores of silver	Internal—as powder	Imbalance of the first and third humors
46 SĀMUDRA *Su* **1**, 89 *Vi* **8**, 141 *Syn* SĀMUDRAKA *Su* **27**, 304	Sea salt	(*a*) Ingredient of rectal enema (*b*) Internal—in powder mixtures	(*a*) Imbalance of the humors (as tranquillizer) (*b*) Ind gestion loss of appetite
47 SARVALOHA *Ci.* **1/3**, 46	Tin lead iron, copper and silver	Internal—as finely-divided pow ders boiled with myrobolan juice	As general tonic
48 SĪSAKA *Śa* **3**, 16, *Ci* **7**, 88, **17**, 126	Lead	(*a*) Internal—in pills, after pro-longed immers on of the pow dered metal in cow s urine (*b*) Internal—in linctus as powder	(*a*) Cutaneous eruptions (*b*) Asthma cough, hiccup
49 SAURĀṢṬRĪ *Ci* **7**, 114, **15**, 138, **30**, 79, 98	Alum	(*a*) External—in medicated o l (*b*) Internal—in linctus	(*a*) Intestinal worms pruritus, leucorrhoea erosion of the cervix, prolapsed uterus, etc (*b*) Gastric disorders, enlarged spleen, colic pain, jaundice, anorexia etc

TABLE 4

Medicinal substances of Mineral Origin & their Uses—(Contd)

Name and reference	Modern equivalent	Mode of use or application	Medicinal uses in
50 SAUVARCALA *Sū* 1, 88, 28, 20, etc., Ni 8, 14 *Sā* 8, 34 Ci 5, 69, 8, 142, etc , *Ka* 7, 53 *Si* 7, 17, 9, 19, etc.	Salt obtained by boiling alkali with myrobolans	(*a*) External—in various modes of application (*b*) Internal—in a large number of prescriptions	(*a*) & (*b*) Used in a large number of pathological conditions
51 SPHAṬIKA Ci 1/4, 22, 17, 125	Quartz	(*a*) Internal—in linctus as fine powder (*b*) Internal—in medicated ghee	(*a*) Asthma, cough, hiccup (*b*) As a general tonic
52 SUVARṆAMĀKṢIKA Ci 7, 71	Pyrites ore	Internal—the powder after digestion with acid juices	A general remedy in all diseases
53 TĀMRA Ci 21, 231	Copper	Material for hot fomentation	Varicocele, hard cutaneous swellings
54 TĀMRARAJAS Ci 1/1, 58, 1/4, 22, 17, 126, 24, 246, etc	Finely divided copper	(*a*) External—in eye-ointment (*b*) Internal—in linctus (*c*) Internal—in mixture after digestion with plant juices	(*a*) Eye diseases (*b*) Accumulation of waste matter in stomach, hiccup (*c*) General weakness and debility
55 TĀMRAŚILĀJATU Ci 1/3, 58	Mineral bitumen from ores of copper	Internal—as powder	As a vitalizing tonic
56. TĪKṢṆĀYASA Ci 1/3, 16	Tempered iron or steel	Internal—in pills after digestion of thin foils of the metal in acid juices	As a vitalizing tonic
57 TILAKṢĀRA Sū 3, 14	Alkaline ash from sesame seeds	External—in ointment	Ringworm, pruritus, papules on the skin surface
58. TRAPU *Sū* 5, 74, Ci 7, 88, *Si* 3, 7	Tin	(*a*) Material for enema tube, etc (*b*) External—as ingredient of dusting powder	(*b*) Cutaneous eruptions
59 UDBHIDA-SAINDHAVA *Sū* 1, 88, 27, 303, Ni 8, 141; Ci 15, 85, 26, 227	Salt obtained from ashes of marine plants	(*a*) In rectal enema (*b*) Internal—in medicated ghee (*c*) Internal—in oil emulsion	(*a*) Constipation, colic pain, enlarged spleen, abdominal diseases, etc (*b*) Diseases of the eye, mouth and ear

60 VAIDURYA *Ci* 1/4, 22 4, 79 etc	Beryl (cat s eye)	(*a*) External—in eye-o ntment as powder (*b*) Internal—in linctus (*c*) Internal—in aqueous infusion	(*a*) Eye-diseases (*b*) Asthma cough, h ccup (*c*) Haemotherm a
61 VAJRA *Ci* 7, 22 23, 252	D amond	Internal—finely powdered and mixed with plant ju ces	*As a general remedy for all a lments*
62 VALMĪKA MṚTTIKĀ *Ci* 27, 49 51, 54	*The deposit* of white-ant h lls	External—as massaging powder	Spastic paraplegia
63 VIṢAMŪṢIKĀ *Ci* 23, 253	The anti poison gem	External—to be worn in contact with *the skin*	Antidote for po soning
64 VARĀṬAKA *Ci* 26, 224	Lime obta ned by burning cowr e shells	Internal—as powder suspended in medicated oil	Ear ache

TABLE 5

Cereals and Legumes

ŚŪKADHĀNYA-VARGA (Cereals)	
(1) Varieties of rice —	*Raktaśali, Mahasali Kalama, Śakunahrta, Turnaka Dirghaśuka Gaura, Panduka, Langula, Śarībhakhya, Promodaka, Patanga, Tapanīya, Yavaka, Havana Pamsu vapya Naiṣadhaka Svastika, Gaurasvastika, Varaka, Uddalaka, Cina Śarada Ujjvala, Dardura, Gandhana, Kurucinda, Vrihi* and *Patala* (*Su* 27, 6-13)
(2) Varieties of millet —	*Śyamaka Hasti śyamaka, Ambhas śyamaka, Nivara Toyaparnī, Gavedhuka, Prasantika, Lauhitya Anu, Priyangu, Mukunda Jhintigarmuti, Varuka, Varaka, Śucira, Utkata,* and *Jurnahvi* (*Sū* 27, 16-18)
(3) Other varieties of corns —	*Yava* (barley), *Venuyava* (bamboo-seeds), *Godhuma* (wheat), *Nandimukhi* and *Madhuli* (*Su* 27, 19 22)
ŚAMĪDHĀNYA-VARGA (Legumes)	*Mudga* (green gram), *Masa* (black gram), *Rajamasa* (black-eye pea), *Kulattha* (horse gram), *Madhustaka* (moth gram), *Canaka* (chick pea), *Masura* (lentil), *Sahorenava* (common pea), *Tila* (sesame), *Simbi, Adaka* (pigeon-pea), *Saidagaja, Avalmuga, Kakanda* (sword bean), *Uma* (linseed), *Ātmagupta* (cowage) (*Su* 27, 23-34)

TABLE 6

Natural Waters

JALA-VARGA *Sū* 27, 197-216

Name and reference	English translation
ANŪPA-JALA	Water of fresh water lakes
BĀPĪ-JALA	Water of artificial tanks
HAIMA JALA	Water from melting ice or snow
KŪPA-JALA	Well water
NADYA-JALA	River water
PRASRAVANA-JALA	Water of surface springs and geysers
ŚAILA-JALA	Water of hill or mountain springs
SAROJALA	Water of ponds
ŚIŚIRA	Dew
TAḌĀGA-JALA	Water of artificial lakes
TOYADA-JALA	Rain water
TUṢĀRA	Snow
VARUṆĀLAYA-JALA	Sea water

TABLE 7

Sugar cane Derivatives & Types of Honey

Name and reference	English translation
RASA VARGA, *Su* **27,** 238-242	Sweet juices and their derivatives
AVAŚOSITA RASA	Sugar-cane juice boiled down to half one third or one fourth of its original bulk
DHAUTA GUḌA	Clarified *guda*
GUḌA	Dark brown semi-crystallized crude sugar
IKSU RASA	Sugar cane juice
KHANḌA ŚARKARĀ	Candied sugar
KṢUDRA GUḌA	Dark coloured treacle (or molasses)
MADHU ŚARKARĀ	Crystallized honey
MATSYA PINDAKA	Crude granulated sugar
PAUNḌRAKA	Sugar cane juice (clarified)
ŚARKARĀ	Crystallized cane sugar
VAMŚAKA	Unclarified sweet juice of the Camel thorn (*Alhagi maurorum*)
YĀNTRIKA RASA	Mechanically pressed cane juice
MADHU VARGA *Su* **27,** 243	Honeys
BHRĀMARA	Honey of the *Apis dorsata*
KSAUDRA	Dark coloured honey from unspecified source
MĀKSIKA	Bee honey
PAUTTIKA	Insect or wasp honey

TABLE 8
Milk and Milk-products
PAYOVARGA *Sū* **27, 217-236**

Name and reference	English translation
ĀVIKA GHṚTA	Clarified butter prepared from sheep's milk
ĀVIKA-PAYAS	Sheep's milk
CHĀGA-GHṚTA	Clarified butter prepared from goat's milk
CHĀGA-PAYAS	Goat's milk
DADHI	Sour milk(curds or koumiss)
EKAŚAPHA-PAYAS	Milk from animals with uncloven hooves
GAVYA GHṚTA	Clarified butter from cow's milk
GAVYA-PAYAS	Cow's milk
GHṚTA	Clarified butter from any source, or any preparation containing a major proportion of clarified butter
HASTINĪ-PAYAS	Elephant's milk
KILĀTA	Concentrated milk
MAHIṢĪ-GHṚTA	Clarified butter from buffalo-milk
MAHIṢĪ-PAYAS	Buffalo's milk
MAṆḌA	Casein
MAṆḌAKA	Immature curds (partly souredmilk)
MĀNUṢA PAYAS	Human milk
MORAṬA	Thickened milk
NAVANĪTA	Butter
SARA	Coagulum of milk
TAKRA	Dilute buttermilk
TAKRAPIṆḌAKA	*Coagulated (solid portion of)* buttermilk
UṢṬRĪ-PAYAS	Camel's milk

TABLE 9
Vegetable Oils
TAILA-VARGA Su **27**, 291 293

Name and reference	*English translation*
ATASYA TAILA	Linseed oil
ERANḌA TAILA	Castor oil
KUSUMBHA TAILA	Safflower oil
PRIYĀLA TAILA	Oil of the *Buchanania Latifolia*
SARṢAPA TAILA	Mustard oil
TILA TAILA *Su* **13** 12	Sesame (*Sesamum indicum*) oil

TABLE 10
Alcoholic Beverages
MADYA-VARGA Sū 27, 179 193

Name and reference	English translation
ABHINAVA MADYA	Freshly fermented liquor
ĀKṢIKI	Fermented liquor from the chebulic myrobolan
AMLAKĀÑJIKA, Ci 5, 77 *Syn* *Kañjika* *Dhanyamla, Sū* 15, 7 *Tuṣodaka*	Sour fermented liquor from rice gruel
ĀRANĀLA, Ci 15, 116	Sour gruel from fermented boiled rice
ARIṢṬA	Distilled wine for medicinal use
ĀSAVA	General name for distilled wine
ĀSUTA, Ci. 15, 121	Brewed mixture containing *Soma* plant juice
GAUḌA	Rum prepared from crystallized brown sugar
JAGALA	Fermented liquor prepared from unboiled rice
MADHULIKA	Clear fermented liquor from *Mohua* fruits
MADHUSUKTA Ci 26, 227	Fermented liquor from a mixture of sugar-cane juice, dark brown crude sugar and boiled rice sweetened with honey
MADHVĀSAVA	Rum prepared from honey
MĀDHVĪKA	Fermented liquor sweetened with honey
MADYA *Syn* *Sura*	Fermented liquor from barley, etc.
MADIRĀ *Syn* *Suramanda* *Varunimanda*, Ci 5, 92	Distilled wine containing least amount of water (of high alcohol content)
MAIREYA	Mixed wine containing equal quantities of rum and fermented (undistilled) wine
MṚDAUKA	Fermented liquor from grape juice
PAKVARASA *Syn* *Sidhu, Vi* 8 140	Fermented liquor from mixture of thickened cane juice and dark brown crude sugar
Prasanna, Ci 26 18	Clear decanted layer of fermented liquors
RASĀSAVA	*Fermented liquor of sugar-cane juice*
ŚARKARĀ	Fermented liquor from cane sugar solution
SAUVĪRAKA	A type of fermented liquor
ŚĪTARASIKA	Fermented liquor from cold (unboiled) sugar-cane juice
SUKTA, Ci 29, 9	Fermented liquor from mixture of cold sugar cane juice and boiled rice
SURĀSAVA	Wine distilled from fermented liquor
TUṢĀMBU	*Sour fermented liquor from barley gruel*

TABLE 11-A
Anatomical Terms—General

Name and reference	Modern name
1 ADHARAGUDA, *Śa* **7**, 10	Anus
2 AKSI, *Śa* **7**, 11	Eye
3 AKṢIKANIKĀ, *Śa* **7**, 11	Pupils
4 AKṢIKŪṬA *Śa* **7**, 11	Eye balls
5 AKSIVARTMA, *Śa* **7**, 11	Eye lids
6 ĀMĀŚAYA, *Śa* **7**, 10	Stomach
7 AMSA, *Vi* **8**, 117	Shoulder blade
8 ĀNANA, *Vi* **8**, 117	Face
9 ANGULA, *Su* **26**, 67	Finger
10 ANUṢASIRĀ, *Śa* **7**, *13* (*29 956 in* number)	*Capillaries*
11 ARATNI, *Vi* **8**, *107*	*Bones of the forearm*
12 ASRKDHARA, *Śa* **7**, 4	Capillary
13 ĀSYA, *Vi* **8**, 117	Mouth
14 AVATTA *Śa* *7*, 11	*Base of the skull*
15 BASTIŚĪRSA, *Vi* **8**, 117	Lower abdomen
16 BHAGA, *Vi* **8**, 117	Vagina
17 CIBUKA, *Vi* **8**, 107	*Chin*
18 DANTA, *Śa* *7*, 11	*Tooth*
19 DANTAVEṢṬAKA *Śa* **7**, 11	Gums
20 DHAMANĪ, *Vi* **5**, 9 (200 in number)	*Artery*
21 GALAŚUNḌI, *Śa* **7**, 11	Tonsils
22 GAṆḌA, *Vi* **8**, 105	Cheek
23 GARBHĀŚAYA *Śa* *3*, *3*	*Uterus*
24 GOJIHVIKĀ *Śa* **7**, 11	Tongue
25 GRĪVĀ, *Su* **20**, 8	Front of the neck
26 GUDA, *Su* **27**, 275	Rectal passage
27 GULPHA, *V* **8**, 107	Ankle
28 HANU, *Vi* **8**, 105	Jaw
29 HASTA, *Vi* *8*, *117*	Hand
30 HṚDAYA, *Su* **17**, 3	Heart

Table II A
Anatomical Terms—General (contd.)

Name and reference	Modern name
31 JANGHĀ *Sū* 16, 8	Calf
32 JATRU *Vi* 8, 107	*Collar bone*
33 JĀNU *Vi* 8, 107	Knee
34 JARĀYU *Śā* 3, 6	Womb
35 KAKṢA *Vi* 8, 105	Arm pit
36 KANDARA *Sū* 11, 48	Sinew
37 KARṆAPATRAKA *Śā* 7, 11	Outer ear
38 KARṆAŚAṢKULIKA *Śā* 7, 11	Inner ear
39 KAṬI *Vi* 8, 117	Waist
40 KEŚA, *Sū* 20, 11	Hair
41 KEŚABHŪMI *Sū* 20, 11	Scalp
42 KLOMAN *Sū* 17, 93	Broncho-pneumonial tract
43 KOṢṬHĀNGA *Śā* 7, 10	Alimentary canal
44 KṚKĀTIKĀ *Vi* 8, 105	Nape of neck
45 KṢUDRĀNTRA, *Śā* 7, 10	Small intestines
46 KUKṢI *Sū* 17, 93	Abdomen
47 KUKUNDARA *Śā* 7, 11	Flanks
48 LALĀṬA *Vi* 8, 105	Forehead
49 LOMAN *Vi* 8, 106	Body hair
50 LOMAKŪPA, *Śā* 6, 23	Skin pore
51 MĀMSA *Sū* 17, 82	Muscles (flesh)
52 MARMA *Sū* 11, 49 (107 in number)	Viscera, vital parts
53 MASTIṢKA *Si* 9, 80	Cranial matter (brain)
54 MEDAS *Sū* 16, 9	Adipose tissue
55 MEḌHRA, *Sū* 27, 275	Urethra
56 MŪRDHAN *Sū* 11, 48	Cranium (skull)
57 MŪTRĀŚAYA *Vi* 8, 117	Urinary bladder
58 NĀBHI *Sū* 17, 93	Navel
59 NĀSĀ *Śā* 8, 19	Nose
60 NĀSĀPUṬA *Śā* 8, 19	Nostrils

TABLE 11-A
Anatomical Terms—General (contd)

Name and reference	Modern equivalent
61 NITAMBA, *Śa* **7**, 11	Buttocks
62 OṢṬHA, *Śā* **7**, 11	Lips
63 PĀDA, *Su* **26**, 67	Feet
64 PĀDAHṚDAYA, *Śa* **7**, 11	Soles of the feet
65 PĀDĀṄGULA, *Su* **26**, 67	Toes
66 PAKVĀŚAYA, *Su* **2**, 10	Colon
67 PĀNIHṚDAYA, *Śa* **7**, 11	Palms of the hands
68 PĀRSNYA, *Vi* **8**, 107	Heel
69 PARVAN, *Su* **26**, 8	Joints
70 PIṆḌIKA, *Śa* **7**, 11 (*Pesi—Śa*, **7**, 14) —400 in number	Muscles
71 PLĪHĀ, *Su* **17**, 93	Spleen
72 PRAPĀNI, *Vi* **8**, 117	Forearm
73 PRAVĀHA, *Vi* **8**, 117	Upper arm
74 PṚṢṬHA, *Vi* **8**, 117	Back
75 PURĪSĀDHĀRA, *Śa* **7**, 10	Pelvic colon
76 RASĀYANYA, *Vi* **5**, 8	Capillaries
77 SAKTHI, *Su* **20**, 8	Thigh-bone
78 SAMVṚTĀSAMVṚTA, *Vi* **5**, 8	Body channel closed at one end
79 SANDHI, *Śa* **7**, 14 (200 in number)	Joint
80 ŞANKHYA, *Vi* **8**, 105	Temples
81. ŞARĪRACCHIDRA, *Vi* **5**, 8	Body orifice
82 ŚEFA, *Vi* **8**, 117	Penis
83 ŚIRAS, *Su* **17**, 3	Head
84 SIRĀ, *Vi* **5**, 9 (700 in number)	Vein
85 ŚLEṢMABHAVA *Śa* **7**, 11	Lungs
86 SKANDHA, *Su* **27**, 334	Shoulder
87 SNĀYU, *Su* **11**, 48 (900 in number)	Tendon, nerve
88 SPHIK, *Su*, **21**, 15	Hip
89 ŚROṆI, *Sū* **27**, 275	Pelvis
90 STANA, *Vi* **8**, 117	Breast

TABLE II-A
Anatomical Terms—General (contd.)

Name and reference	Modern name
91 STANAMAṆḌALA *Śā* 4, 16	Areola
92 STHŪLĀNTRA *Śā* 7, 10	Large intestines
93 ŚUKRĀŚAYA *Śā* 2, 19	Seminal vessel
94 SVĀNI, *Śā* 7, 42	Bodily orifice
95 SVEDAMUKHA, *Śā* 7, 42	Openings of sweat glands
96 TĀLU *Śā* 7, 11	Palate
97 TAMAKA *Ci* 17, 62	Bronchial tract
98 TṚKA *Ci* 8, 117	Sacrum
99 UDAGDHARĀ *Śā* 7, 4	Epidermis
100 UKHA *Śā* 7, 11	Axilla
101 UPAJIHVIKĀ *Śā* 7, 11	Uvula
102 ŪRU, *Sū* 16, 8	Thigh
103 UTSEDHA *Ci* 8, 117	Neck
104 UTTARAGUDA *Śā* 7, 10	Upper part of the rectal passage
105 VANKṢAṆA *Sū* 14, 10	Groin
106 VAPĀVAHANA, *Śā* 7, 10	Omentum
107 VṚKKA *Sū* 17, 93	Kidney
108 VṚṢAṆA *Sū* 14, 10	Testicles
109 YAKṚT *Sū* 17, 93	Liver

TABLE 11-B

Bones in the Human Body

In the *Caraka Samhita* the total number of *asthi* (a general term used by Caraka for bones teeth, nails, hard cartilages and bone sockets) in the human body is said to be 360 which include (*Śa* 7, 6)

Name	Number	Modern equivalent
1 AKṢAKA	2	Collar bones
2 AMSA	2	Cannot be identified with any modern description
3 AMSA PHALAKA	2	*Scapula or shoulder blades*
4 ARATNI	4	Radius and ulna of the forearm
5 BĀHUNALAKA	2	Bones of the upper arms
6 BHAGĀSTHI	1	Pubic bone or the sacrum-cum-coccyx
7 DANTA	32	Teeth
8 DANTOLŪKHALA	32	Sockets of the teeth
9 GRĪVĀSTHI	15	Bones in the column of neck
10 GULPHA	4	Ankle bones or malleoli
11 HANVASTHI	1	Lower jaw bone
12 HANUMŪLABANDHANA	2	Attachment or binding bones of the lower jaw
13 HASTA MANIKA	2	Bones of the wrists
14 JANGHĀ	4	Tibia and fibula of the legs
15 JĀNU	2	Knee caps
16 JATRU	1	Cartilage of the wind pipe
17 KAPĀLIKA	2	*Elbow-pans*
18 NAKHA	20	Nails
19 NĀSIKĀ-GAṆḌA KŪTA LALĀṬA	1	Two nasal two molar and two superciliary ridges of the eye-brows
20 PĀNIPĀDĀNGULYASTHI	60	Digital bones or phalanges of the toes and fingers (56 only)
21 PĀNIPĀDAŚALĀKĀ	20	Metacarpal and metatarsal bones
22 PĀNIPĀDAŚALĀKĀDHIṢṬHĀNA	4	Bases of the metacarpal and metatarsal bones
23 PĀRṢṆYASTHI	2	Heel bones
24 PARŚUKĀ	24	Ribs
25 PṚṢṬHAGATĀSTHI	45	Backbone or the vertebral column
26 ŚANKHYA	2	Temple-bones
27 ŚIRAḤKAPĀLA	4	Cranial bones

Table 11-B
Bones in the Human Body (contd.)

Name	Number	Modern equivalent
28 ŚRONIPHALAKA	2	Pelvic bones (*os innominatum*)
29 STHĀLAKA	24	Sockets of the ribs
30 STHĀLAKĀRBUDA	24	Tubercles of the ribs
31 TĀLUKA	2	Hard palate
32 URASASTHI	14	Breast bones
33 ŪRUNALAKA	2	Thigh bones

The total number of bones in the human body as given in modern anatomy is 206 only

TABLE 12
Physiological Terms

	Name and reference	Modern name
1	ĀMAGARBHA, *Su* **6**, 10	Embryo (egg)
2	ANTRAPĀKA, *Ci* **15**, 38	Digestive process
3	ANURASA, *Su*, **26**, 28	Latent taste
4	APARĀ, *Śa* **6**, 23	Placenta
5	APICCHADA, *Su* **28**, 4	Serum
6	ĀRTAVA, *Śa* **3**, 3	Ovum
7	AŚRU, *Ci* **26**, 23	Lachrymal fluid
8	BĪJAGRAHANA, *Śa* **2**, 23	Fertilization of the ovum
9	DHĀTU, *Su* **7**, 49	Major constituents of the human body
10	DṚṢṬI, *Sū* **8**, 8	Vision
11	GARBHA, *Su* **7** 39	Conception
12	GHRĀNA, *Su* **8**, 8	Sense of smell
13	HRDAYASPANDANA, *Ci* **16**, 12	Heart beat
14	KAPHA, *Su* **16**, 9	Phlegm or secretion of mucus
15	KIṬṬA, *Su*, **28**, 3	Secretion or bodily waste products
16	LASI, *Su*, **28**, 8	Lymphatic fluid
17	MAJJĀ, *Su* **13**, 17	Bone-marrow
18	MALA, *Sū* **7** 42	Excretions of the body
19	MASTIṢKA or MASTULANGA, *Su* **9**, 81, 90	Brain-matter
20	MŪTRA, *Su* **14**, 4	Urine
21	NĀBHINĀḌĪ, *Śa* **6**, 23	Umbilical cord
22	OJAS, *Su*, **17**, 75	Vital essence
23	PARINĀMĀPADYA, *Vi* **5**, 6	Metabolic process
24	PITTA, *Su* **3**, 6	Bile
25	PRĀNA, *Vi* **5**, 6	Life breath
26	PURĪṢA *Su* **14**, 4	Faeces
27	RAJAS, *Su* **25**, 40	Menstrual flow
28	RASA, *Su* **17**, 64	Nutrient body fluid
29	RAKTA, *Su* **11**, 48	Blood
30	RASANĀ, *Su* **8**, 8	Sense of taste

Table 12
Physiological Terms (contd.)

Name and reference	Modern name
31 RUDHIRASROTAS, *Vi* 5, 6	Blood flow
32 SAMKOCA, *Sū* 7, 18	Muscular contraction
33 SPARŚA, *Sū* 8, 8	Sense of touch
34 SROTAS, *Vi* 5, 8	Movement of fluids through channels in the human body
35 ŚROTRA, *Sū* 8, 8	Sense of hearing
37. ŚUKRA, *Vi* 5, 6	Semen
37 SVEDA, *Vi* 5, 6	Sweat
38 SVEDĀGAMA, *Sū* 7, 15	Perspiration
39 UDGĀRA, *Sū* 7, 33	Eructation
40 UDRANA, *Śā* 4, 16	Erection
41. UPADEHA, *Ci* 26, 23	Mucus cells
42 VĪRYA, *Sū* 26, 66	Potency

TABLE 13

Diseases

Name and reference	Modern name
1 ADHIJIHVĀ, *Ci* **12**, 77	Abscess under the tongue
2 AGNIMĀNDYA, *Sū*, **20**, 17	Dyspepsia
3 AJĀTODAKA, Ci **13**, *58*	*Dehydration of the stomach*
4 AKṢIBHEDA, *Su* **20**, 1	Squint eye
5 AKṢIPĀKA, *Su* **20**, 14	Ophthalmitis
6 AKSIROGA, *Ci* **26**, 130 (Ninety six varieties mentioned, but neither named nor described)	Eye-affection
7 ĀLAJI, *Ci* **12**, 88	Whitlow
8 ĀMADOṢA, *Vi* **2**, 10	Disorders of chyme formation
9 AMLAPITTA, *Ci* **15**, 47	Acid dyspepsia
10 ĀNĀHA, *Ci* **28**, 29	Acute constipation
11 ANIDRĀ, *Ci* **28**, 21	Insomnia
12 ANTARĀYĀMA, *Ci* **28**, 43	Stiff neck
13 ANTRĀPĀNAVIDAHA, Su **24**, *14*	*Intestinal inflammation*
14 ANTRAVRDDHI, *Ci* **12**, 94	Hernia
15 APASMĀRA, *Ci* **10**, 3 (Five types described according to etiology)	Epilepsy
16 APATASTRAKA, *Si* **9**, *12*	Convulsions with body bent like a bow (Tetanus)
17 ARDHĀVABHEDA, *Si* **9**, 74	Hemicrania
18 ARBUDA, *Ci* **12**, 87	Non suppurating swelling
19 ARDITA, *Su* **20**, 11	Facial paralysis
20 AROCAKA, *Ci* **26**, 124 (Six types described according to etiology)	Anorexia
21 ARŚA, Ci **14**, *7 (Seven types described according to etiology)*	Haemorrhoids
22 AŚMARI, *Ci* **26**, 36 (Two types according to etiology)	Urinary calculus
23 ASTHIKSAYA, *Su* **17**, 67	Atrophy of bones
24 ĀSYAVIPĀKA, *Su* **20**, *14*	*Stomatitis*
25 ATAKTYĀBHINIVEŚA, *Ci* **10**, *52*	Psychic epilepsy
26 ATISĀRA, *Ci* **19**, 4	Dysentery
(*a*) ĀMĀTISĀRA, *Ci* **19**, 5	Dysentery with mucus discharge

Table 13
Diseases (contd.)

Name and reference	Modern name
(*b*) RAKTĀTISĀRA, *Ci* 19, 70	Dysentery with blood discharge
(Six other types described according to etiology)	
27 ATISTHŪLA, *Sū* 21, 4	Excessive obesity
28 BHAGANDARA, *Ci* 12, 96	Anal fistula
29 CYUTASANDHI, *Ci* 25, 68	Dislocation
30 DANTABHEDA, *Sū* 20, 11	Dental schism
31 DANTAMĀṂSA VIDRADHI, *Ci* 12, 78	Gum boil
32 DANTAŚAITHILYA, *Sū* 20, 11	Loose teeth
33 DHAMANĪPRATICAYA, *Sū* 20, 177	Dilatation of blood vessels
34 DHANUṢTAMBHA, *Sū* 20, 14	Tetanus
35 *DURMA*, *Sū* 17, 73	Neurasthenia
36 EKĀṄGAROGA, *Sū* 20, 11	Monoplegia
37 GALAGAṆḌA, *Ci* 12, 79	Tumour on the side of the neck
38 GALAGRAHA, *Sū* 18, 22	Acute swelling inside throat
39 GALAPĀKA, *Sū* 20, 14	Suppurated inflammation in the throat
40 GALAŚUṆḌIKĀ, *Sū* 18, 20	Tonsilitis
41 GARBHIṆĪROGA, *Śā* 8, 26	Diseases of pregnancy
42 GRAHAṆĪDOṢA, *Ci* 15, 51 (Four types described according to etiology)	Diarrhoea
43 GRANTHI, *Ci* 12, 81	Glandular swelling, varicocele
44 GṚDHRASĪ, *Sū* 20, 11	Sciatica
45 GUDABHRAṂŚA, *Sū* 20, 11	Prolapsed anus
46. GUDAPĀKA, *Sū* 20, 14	Proctitis of the anus
47 GULMA, *Ci* 5, 48 (Six types described according to etiology)	Hardening and swelling of the spleen
48 HṚDDRAVA, *Sū* 20, 11	Tachycardia
49 HṚDROGA, *Sū* 17, 6 (*Five types mentioned, but not described*)	Heart disease
50 HṚNMOHA, *Sū* 20, 11	Cardiac irregularity or heart-block
51 IKṢUVĀLIKĀRASAMEHA, *Ni* 4, 10	Glycosuria
52 JALAKAGARDABHA, *Ci* 12, 99	Fever due to suppuration
53 JĀNUBHEDA, *Sū* 20, 11	[illegible]

TABLE 13
Diseases (contd)

Name and reference	Modern name
54 JĀNUVIŚLESA *Su* **20**, 11	Knock knees
55 JAṬHARĀGNIVIKĀRA *Vi* **6**, 12 (Four types named and described according to symptoms)	Morbid appetite
56 JVARA *Ci* chapter 3 (Eight types described according to etiology which includes *sannipata* (typhoid) *Su* **17**, 41)	Fever
57 KAKṢĀ *Su* **20**, 14	Herpes
58 KAṆḌU, *Ci* **29**, 17	Pruritus
59 KARNAROGA *Ci* **26**, 127	Diseases of the ear
(*a*) BĀDHIRYA, *Ci* **26**, 128	Deafness
(*b*) KARNAŚOPHA *Ci* **29**, 127	Inflammatory swelling inside ear
(*c*) KARNASRĀVA *Ci* **26**, 127	Pus discharge from the ear
(*d*) PŪTISRAVANA *Ci* **26**, 127 (Also eight other types according to symptoms)	*Suppuration of the inner the ear*
60 KĀSA *Ci* chapter 18 (Five varieties described according to etiology)	Chronic cough
61 KEŚABHŪMISPHUṬANAM, *Su* **20**, 11	Fissures of the scalp
62 KHĀLITVA *Su* **5**, 30	Baldness
63 KHAÑJATVA *Su* **20**, 11	Lameness
64 KLAIBYA *Ci* **30**, 154 (Four types described according to etiology)	Impotency of the male
65 KOṬA *Su* **24** 16	Localized thickening of muscle fibres
66 KṚMI *Su* **19**, 9 (Nineteen types according to nature of the parasites)	*Parasitic infections*
67 KṢĪRA DOṢA *Ci* **30**, 237 (Eleven types according to etiology and symptoms)	Disorder of lactation
68 KUBJATVA *Su* **20**, 11	Hunch back condition
69 KUṢṬHA *Ci* chapter 7	Chronic skin diseases
(*a*) ALASAKA *Ci* **7**, 23	Itching red papules
(*b*) CARMADALA *Ci* **7**, 24	Easily bursting itching eruptions
(*c*) CARMAKUSTHA *Ci* **7**, 21	Extensive eczema with thickened dermis
(*d*) EKAKUṢṬHA *Ci* **7**, 21	Localized eczema
(*e*) DADRU, *Ci* **7**, 23	Ringworm

TABLE 13
Diseases (contd.)

Name and reference	Modern name
(*f*) KĀKAṆA, *Ci* 7, 20	Malignant growths
(*g*) KAPĀLA, *Ci* 7, 14	Erythema
(*h*) KILĀSA, *Ci* 7, 173	Fresh leprous lesions
(*i*) KIṬIMA, *Ci* 7, 22	Hard, rough and discoloured dermatosis
(*j*) MAṆḌALA, *Ci* 7, 16	Urticarial dermatosis
(*k*) PĀMĀ, *Ci* 7, 25	Mild leprosy
(*l*) PUṆḌARĪKA, *Ci* 7, 18	Ulcerated dermatosis
(*m*) ṚṢYAJIHVAKA, *Ci* 7, 18	Suppurated dermatosis
(*n*) ŚATARU, *Ci* 7, 26	Leprous sores gangrene
(*o*) SIDHMA, *Ci* 7, 19	Psoriasis
(*p*) ŚVITRA, *Ci* 7, 173	Patchy dermatosis
(*q*) UDUMBARA, *Ci* 7, 15	Acute, non-healing sores
(*r*) VICARCIKĀ, *Ci* 7, 26	Scabies
(*s*) VIPĀDIKĀ, *Ci* 7, 22	Dermatosis with fissures in the extremeties
(*t*) VISPHOṬAKA, *Ci* 7, 25	Boils
70 LALĀṬABHEDA, *Sū* 20, 11	Frontal headache
71 LIṄGAPĀKA, *Ci* 30, 168	Suppuration and sores of the penis
72 MADĀTYAYA *Ci* chapter 24 (Six types described according to symptoms)	Chronic alcoholism
73 MADHUMEHA, *Sū* 4, 43, *Ci* 6, 55-56	Diabetes (described as incurable)
74 MĀMSAKLEDA, *Sū* 20, 14	Softening and degeneration of muscular tissues
75 MANOVIKĀRA, *Sū* 7, 52	Psychic disorders
76 MASŪRIKĀ, *Ci* 12, 93	Pox
77 MEḌHRAPĀKA, *Sū* 20, 14	Urethritis
78 MṚTAGARBHA, *Śā* 8, 30	Chronic abortion
79 MŪKATVA *Sū* 20, 11	Dumbness
80 MUKHAROGA *Ci* 26, 119	Oral diseases
81 MŪRCCHĀ *Sū* 24, 35 (Five types described according to etiology)	Fainting fits
82 MŪTRAJAṬHARA, *Si* 9, 30	Retention of urine causing distension of the lower abdomen

TABLE 13
Diseases (contd)

Name and reference	Modern name
83 MŪTRAKṚCCHRA Ci 26, 32 (Eight types described according to etiology)	Dysuria
84 MŪTRAKSAYA Si 9, 34	Uraemia
85 MŪTRĀTĪTA Si 9, 35	Chronic difficulty and delay in micturition
86 MŪTROTSAṄGA Si 9, 34	Blood discharge with urine
87 NĀḌĪVRANA Ci 25, 56	Sinus of fistula
88 NĀḌĪROGA Śa 8, 45 (Four types named but not described)	*Diseases of new born babies*
89 NĀSĀROGA Ci chapetr 26	Diseases of the nasal passage
(a) DUSṬAPRATIŚAYA Ci 26, 110	Pernicious rhinitis
(b) GHRĀNAPĀKA Ci 26, 115	Anosmia
(c) NĀSĀRŚAS, Ci 14, 6	Polypus in nose
(d) NĀSĀRBUDA Ci 26, 116	Tumour in nose
(e) NĀSĀSRĀVA Ci 26, 112	Catarrh
(f) NĀSĀŚṚṄGĀṬAKA Ci 26, 111	*Atrophy of the sense of smell*
(g) PINĀSA Ci 26, 114	Acute rhinitis
(h) PRATINĀHA Ci 26, 112	Obstruction in *the nasal passage*
(i) PŪYARAKTA Ci 26, 116 (Also eleven other minor variations)	Suppuration inside nose
90 NIDRĀDHIKYA Su 20, 17	Hypersomnia
91 OSA Su 20, 14	Heat-stroke
92 OSṬHABHEDA Su 20, 11	Hare-lips
93 PĀDABHRAMŚA Su 20, 11	Fallen arch or flat foot
94 PAKṢAVADHA Su 20, 11	Hemiplagia
95 PĀNDUROGA Ci 16 7	Jaundice
(a) HALIMAKA Ci 16, 132	Jaundice due to anaemia
(b) KĀMALĀ Ci 16, 34 (Three types described according to etiology)	Jaundice due to intestinal disorders
(c) KUMBHAKĀMALĀ Ci 26, 36	Malignant jaundice
96 PĀṄGULYA Su 20, 11	Deformed foot club-foot
97 PĀRŚVAVIMARDA Su 20, 11	Painful spasms in chest with breathing difficulty

TABLE 13
Diseases (contd)

	Name and reference	Modern name
98	PĪDAKA, *Su* **17**, 82	Diabetic eruptions
	(*a*) ALAJĪ, *Ci* **17**, 88	Dry gangrene
	(*b*) JĀLINĪ, *Ci* **17**, 86	Carbuncle with multiple openings
	(*c*) KACCHAPIKĀ, *Su* **17**, 85	Carbuncle with single opening
	(*d*) ŚĀRIVAKA, *Su* **17**, 84	*Circular ulcers*
	(*e*) SARSAPĪ, *Su* **17**, 87	Large boil, surrounded by small secondary pustules
	(*f*) VIDRADHI, *Su* **17**, 10	Abscesses of the inner orgnas
	(*g*) VINATĀ, *Su* **17**, 89	Moist gangrene
99	PLĪHĀROGA, *Su* **19**, 4 (FIve types described according to etiology)	Splenic diseases
100	PRAMEHA, *Ni* **4**, 8 (Twenty variations including diabetes, described *according to symptoms*)	Urinary disorders
101	PŪTIGHRĀNATĀ, *Sū* **14**, 11	Halitosis
102	RĀJAYAKṢMĀ, *Ci* **8**, 14	Pulmonary consumption
103	RAKTAGRANTHI, *Si* **9**, 41	Tumour in the neck of the bladder
104	RAKTAPITTA, *Ci* **4**, 11 (Seven types described according to etiology)	Haemothermia
105	RETODOṢA, *Ci* **30**, 139 (Eight types described according to symptoms)	Seminal disorders
106	ROHINĪ, *Su* **18**, 34	Extensive and painful swelling at the base of the tongue
107	ROMĀNTIKĀ, *Ci* **12**, 92	Small eruptions spread over the entire skin surface
108	ŚĀLUKA, *Ci* **12**, 75	Frightful swelling and inflammation inside throat with stertorus breathing
109	ŚANKHYABHEDA, *Sū* **20**, 11	Migraine
110	SARVĀNGAROGA, *Ci* **28**, 29	General paralysis
111	ŚIROROGA *Su* **17**, 6 (Five types metioned, but not described)	Diseases of the head
112	ŚIRAHŚOPHA, *Ci* **12**, 75	Erysipelas of the head
113	SIRĀSTAMBHA *Ci* **25**, 29	Vascular thrombosis
114	ŚLĪPADA *Ci* **12**, 98	Elephantiasis of the leg
115	ŚOṆITAKLEDA, *Sū* **20**, 14	Pernicious anaemia

TABLE 13

Diseases (contd)

Name and reference	Modern name
116 ŚOSA, *Ni* **6,** 11	Wasting diseases
117 ŚOTHA, *Ai* **12,** 1	Oedema
118 SROTOROGA *Vi* **5,** 8 (Fourteen types named and described according to location)	Diseases of the body fluids and channel
119 SŪRYĀVARTA *Si* **9,** 79	Recurrent neuralgic pain in the had
120 SVARAKṢAYA *Su* **24,** 15	Aphonia
121 ŚVĀSA *Ci* **17,** 46 (Five types described according to symptoms)	Asthma
122 ŚVETAMŪTRAVARCASTVA, *Su* **20,** 17	White and flocculent urine
123 TĀLUVIDRADHI, *Ci* **12,** 77	Abscess of the palate
124 TAMASU, *Su* **20,** 11	Asthenia
125 TAMO TIDARŚANA *Su* **24,** 15	Repeated fa nting fits
126 TIMIRA, *Su* **20,** 11	Partial loss of vision
127 TṚṢNĀ, *Ci* **22,** 57 *(Five types described according to etiology)*	Morb d thirst
128 TVAGAVADĀRANA, *Su* **20,** 14	Scaly skin
129 UDARAROGA *Ci* **13,** 9	Stomach troubles
(*a*) CHIDRODARA *Ci* **13,** 42	Perforation of the stomach or intestinal wall
(*b*) JALODARA, *Ci* **13,** 45	Distens on of the abdomen due to fluid secretion
(*c*) UDARĀVEṢTA *Su* **20,** 11	Cardiac pain originating in stomach
(*d*) UDĀVARTA *Ci* **26,** 6	Paralysis of the intest nes
(*e*) BADDHAGUDODARA *Ci* **13,** 39	Peritonitis
130 UDARDA, *Su* **20,** 17	Urticaria
131 UNAPADĀNKUŚANĪYAKAVIKĀRA *Vi* **3,** 4	Epidemic diseases
132 UNMĀDA *Ci* chapter 9 (Fifteen types described five according to etiology and the others according to symptoms)	Insanity
133 UPAJIHVIKĀ *Ci* **12,** 77	Acute glossitis
134 UPAKUŚA *Ci* **12,** 78	Gingivitis
135 ŪRUSĀDA, *Su* **20,** 11	Atrophy of the thigh muscles
136 ŪRUSTAMBHA, *Ci* chapter 27	Paralysis of the thighs

TABLE 13
Diseases (contd)

Name and reference	Modern name
137. UTSANTRA, *Ci* 25, 58	Displacement of internal organs
138 VĀTABALĀSA, *Ci* 29, 11 (Three types named)	Rheumatism of the joints
139 VĀTASṬILĀ, *Si* 9, 36	Hard tumour in the rectal or urinary passage
140 VIḌĀLIKĀ, *Ci* 12, 76	Angina or quinsy
141 VIDARIKĀ, *Ci* 12, 89	Bubo in the groins
142 VILOMA, *Ci* 25, 118	Alopecia
143 VISAMAJVARA, *Ci* 3, 53 (Six types described according to periodicity)	*Recurrent fevers*
144 VISARPA, *Ci* 21, 29 (Seven types described according to etiology)	Acute spreading suppurations
145 VISŪCIKĀ, *Vi* 2, 10	Choleraic diarrhoea
146 VRADHNA, *Ci* 12, 94 (Five types described according to etiology)	Permanent swellings
147 *VRANA Ci* chapter 25 (Forty-four types mentioned, but not all described, including *nadivrana*)	*Wounds*, sores
148 VRSANAKSEPA, *Su* 20, 11	Crypto-orchitis
149 *YONI-ROGA, *Ci* chapter 30	Diseases of the reproductive organs
(*a*) ACARAṆĀ, *Ci* 30, 18	Itching growth in the vagina
(*b*) ANTARMUKHĪ, *Ci* 30, 29	Inverted uterus
(*c*) ARAJASKA, *Ci* 30, 17	Scanty menstrual flow or amenorrhoea
(*d*) ATICARANĀ *Ci* 30, 19	Chronic vaginitis
(*e*) KARṆINI, *Ci* 30, 27	Inflammation of the cervix
(*f*) MAHĀYONI, *Ci* 30, 35	Prolapsed uterus
(*g*) PARIPLUTA, *Ci* 30, 23	Acute vaginitis
(*h*) PRADARA, *Ci* 30, 203 (Four types described according to etiology and symptoms)	Menstrual disorders
(*i*) PRĀKCARAṆĀ, *Ci* 30, 20	Deflorative vaginitis
(*j*) PUTRAGHNI, *Ci* 30, 28	Chronic abortion
(*k*) RAKTAYONI, *Ci* 30, 16	Menorrhagia

* This term in *Caraka* also includes seminal disorders and impotency in the male, as also diseases of lactation. But these have been mentioned in the present list in their proper order

TABLE 13
Diseases (contd)

Name and reference	Modern name
(*l*) UDĀVARTINĪ *G* 30 25	Dysmenorrhoea
(*m*) UPAPLUTA *C* 30 21	Leucorrhoea
(*n*) VĀMINĪ *C* 30 32	Flow of old deposited semen

TABLE 14
Pathological Conditions and Congenital Defects

	Name and reference	Modern name
1	ABHIGHĀTA, *Śi* 9, 6 (*Three types mentioned*)	Accidental injuries
2	AJĪRNA, *Ci* 15, 42	Indigestion
3	AKṢIŚŪLA, *Su* 20, 11	Eye-ache
4	ĀLĀLAMEHA, *Ni* 4, 10	Discharge of pus with urine
5	ĀLASYA, *Su* 20, 17	Lassitude
6	ĀMAPITTA, *Ci* 22, 15	Biliousness
7	AMLAKA, *Su* 20, 14	Hyperacidity of stomach
8	AMSADĀHA, *Sū* 20, 14	Local burning sensation
9	AÑGAGANDHA, *Su* 20, 14	Body odour
10	AÑGĀVADĀRANA, *Su* 20, 14	Local fissures on the surface of the body
11	ANTARDĀHA, *Su* 20, 14	Burning sensation
12	APATANAKA, *Si* 9, 15	Fainting and groaning
13	ARUCI, *Ci* 8, 60	Distaste for food
14	ASTHIBHAÑGA, *Ci* 25, 68	Fractures
15	ATIDAURBALYA, *Sū* 24, 13	*Prostration*
16	ATIKṚŚA, *Sū* 20, 10	Extreme emaciation
17	ATISVEDA, *Su* 20, 14	Excessive sweating
18	ATṚPTI, *Su* 20, 14	Morbid hunger
19	CHARDI, *Ci* 20, 4 (Five different types described according to etiology)	Nausea, vomiting
20	CHINNAŚVĀSA, *Ci* 17, 54	Interrupted breathing
21	DAVATHU, *Sū* 20, 14	Acid eructation
22	DĀHA, *Sū* 20, 14	Burn
23	DANDAKA, *Sū* 20, 11	Convulsion
24	DHŪMODGĀRA, *Sū* 20, 14	*Gaseous eructation*
25	DURMANAS, *Sū* 17, 73	Neurasthenia
26	DUṢTA, *Ci* 25, 29	Suppurated condition
27	DVIRETAS, *Śā* 2, 17	Hermaphrodite condition
28	GANDAMĀLĀ, *Ci* 12, 79	Chain of tumours around the neck

TABLE 14

Pathological Conditions and Congenital Defects (contd)

Name and reference	Modern name
29 GRĪVĀSTAMBHA, *Su* 20, 11	Rigidity of the neck muscles
30 GUDĀRTISYA, *Sū* 20, 11	Rectal proctalgia
31 GULPHAGRAHA, *Su* 20, 11	Sprained ankle
32 HANUBHEDA, *Su* 20, 11	Dislocated jaws
33 HARITATVA, *Su* 20, 14	Sallow skin
34 HIKKĀ, *Ci* 17, 21 (*Five types described according to symptoms*)	Hiccup
35 HRDAYOPALEPA *Su* 20, 17	Excessive secretion of phlegm
36 JĪVADĀNA, *Su* 20, 14	Haemorrhage
37 JVARA, *Ci* chapter 3 (Eight types described according to etiology)	Rise of body temperature
38 KAMPA, *Su* 24, 15	Tremor
39 KANTHALEPA, *Su* 20, 17	Excessive secretion of mucus in throat
40 KARNAKANDU, *Ci* 26, 128	Itching inside ears
41 KARNANĀDA, *Ci* 26, 128	Buzzing sound inside ears
42 KARNAŚŪLA, *Ci* 26, 127	Ear-ache
43. KARNAVIDĀHA *Ci* 26, 128	Burning sensation inside ears
44 KAṢĀYĀSYATĀ, *Su* 20, 11	Astringent taste in the mouth
45 KHALLI, *Ci* 28, 57	Neuralgic pain in the lower limbs and shoulders
46 KHAÑJATVA, *Sū* 20, 11	Lameness
47 KIKKISA, *Śa* 8, 32	Burning sensation of the vulva and cracking of local skin
48 LAVANĀSYATĀ, *Su* 24, 14	Saline taste in the mouth
49 LOHITA GANDHĀSYATĀ, *Su* 20, 14	Metallic taste in the mouth
50 MADA, *Su* 24, 27 (Seven types described according to symptoms or intoxicating agents)	Intoxication
51 MALĀDHIKYA, *Su* 20, 17	Excessive secretion of faecal matter
52 MĀMSADĀHA, *Su* 20, 14	Burning sensation in the muscles
53 MUKHAMĀDHURYA, *Sū* 20, 17	Persistent sweet taste in the mouth
54 MUKHAŚOṢA, *Su* 20, 11	Dryness of the palate and tongue
55 MUKHASRĀVA, *Su* 20, 17	Excessive salivation

TABLE 14

Pathological Conditions and Congenital Defects (contd.)

Name and reference	Modern name
56. MŪTRAUKASĀDA, Si 9, 28	Dense, turbid and coloured urine
57. PĀDAŚŪLA, Śā 20, 11	Pain in the foot
58. PĀDASUPTATĀ, Sū 20, 11	Muscular cramps in the leg
59. PICCHANA, Śā 17, 4	Contusion
60. PLOṢA, Sū 20, 14	Scorching of the skin
61. PRAMĪLAKA, Sū 24, 12	Torpor of the body
62. PṚṢṬHAGRAHA, Sū 20, 11	Stiffness of the back
63. PŪTIMUKHATĀ, Sū 20, 14	Foetid smell from the mouth
64. PŪTYĀSYATĀ, Sū 24, 11	Putrid taste in the mouth
65. RAJONĀŚA, Sū 20, 11	Suppressed menstrual flow
66. ŚANAIRMEHA, Ni 4, 10	Excessively slow micturition
67. ṢAṆḌHĪ or ṢAṆḌHAYONI, Ci 30, 31	Gynandroid condition in the female
68. SĀNDRAMEHA, Ni 4, 10	Viscous urine
69. SĀNDRAPRASĀDAMEHA, Ni 4, 10	Sedimented urine
70. ŚEPHASTAMBHA, Sū 20, 11	Priapism
71. SIKATĀMEHA, Ni 4, 10	Gravel particles in urine
72. ŚIRORUK, Sū 20, 11	Headache
73. ŚOṢA, Ni 6, 11	Atrophied condition
74. ŚOTHA, Vi 12, 1	Oedema
75. SŪCĪMUKHĪ, Ci 30, 31	Constriction of the cervix
76. ŚUKRAMEHA, Ni 4, 10	Passing of semen with urine
77. STAMBHA, Ci 28, 20	Spastic condition
78. SUPTI, Ci 27, 16	Cramps or temporary paralysis
79. ŚVAYATHU, Ci 12, 12 (Six types described according to etiology)	Swellings
80. ŚVETĀVABHĀSATĀ, Sū 20, 17	Pallor of the skin
81. TAMAḤPRAVEŚA, Sū 20, 14	Total unconsciousness
82. TANDRĀTIYOGA, Sū 24, 1[illegible]	Extreme drowsiness
83. TIKTĀMLODGIRAṆA, Sū 24, 14	Bitter and acid eructation
84. TIKTĀSYATĀ, Sū 20, 14	Bitter taste in the mouth

TABLE 14

Pathological Conditions and Congenital Defects (contd)

Name and reference	Modern name
85 TRIKAGRAHA, *Su* **20**, 11	Neuralgic pain in sacral region
86 TVAGDĀHA, *Su* **20**, 14	Burning sensation of skin
87 UDAKAMEHA, *Ni* **4**, 10	Excessive volume of urine
88 UDVṚTTA, *Ci* **25**, 58	Swelling
89 UPAVEṢṬAKA, *Śa* **8**, 26	Displacement of the foetus
90 UṢMĀDHIKYA, *Su* **20**, 14	Very high temperature
91 VĀGBHAṄGA, *Su* **20**, 11	Failing speech
92 VĀMANATVA, *Su* **20**, 11	Dwarfness
93 VARTMASAMKOCA, *Su* **20**, 11	Retracted eyelids
94 VARTMASTAMBHA, *Su* **20**, 11	Rigidity of eyelids
95 VĀTABASTI, *Si* **9**, 37	Painful retention of urine
96 VĀTIKAṢAṆḌHA, *Śa*. **2**, 21	Eunuch condition in males
97 VEPATHU, *Su* **20**, 11	Shivering
98 VIDĀHA, *Sū* **10**, 95	Suppurated swelling
99 VIJYUTA, *Ci* **25**, 70	Dislocation
100 VIKṢEPA, *Ci* **23**, 33	Muscular rigor
101 VIṢA, *Ci* chapter 23	Toxicosis, poisoning
(*a*) ĀMAVIṢA *Ci* **15**, 46	Food poisoning
(*b*) GARAVIṢA or DŪṢĪVIṢA *Ci* **23**, 14	Poisoning from inorganic substances
(*c*) JANGAMAVIṢA, *Ci* **23**, 9	Poisoning due to bites
(*d*) STHĀVARAVIṢA *Ci* **23**, 11	Poisoning due to vegetable roots and bulbs
102 VIVARNATĀ, *Su* **24**, 13	Depigmentation of the skin
103 YONIŚOṢA, *Ci* **30**, 33	Dryness of the vaginal passage

TABLE 15

Therapeutical, Surgical, and Chemical Terms (contd.)

Name and reference	Modern equivalent
30 VAMANA, *Su* **7,** 15	Emesis
*31 BANDHANA, *Su* **17,** 4	Ligature
*32 BASTIKARMA, *Su* **1,** 86	Application of enema
33 VENIKA, *Ci* **23,** 38	Tourniquet
34 VINNĀSANA, *Vi* **6,** 16	Psychiatric treatment
35 VIRECANA, *Sū* **7,** 15	Purging
36 VYĀDHANA *Su* **11,** 55	Surgical puncturing

Chemical Terms

1 AMLA, *Su* **6,** 11	Acid
2 ATAILA, *Ni* **8,** 150	Oils other than vegetable oils
3 DHĀTUMALA *Ci* **16,** 74	Metallic ores or corroded metals
4 KṢĀRA, *Su* **3,** 14	Alkaline substance
5 LAVANA, *Ci* **10,** 44	Salt
6 LOHA, *Ci* **25,** 103	Metal
7 RĀGA, *Ci* **26,** 28	Dye
8 SNEHA, *Su* **13,** 4	Oil or fat
9 TAILA, *Ni* **8,** 150	Vegetable oil

* Nos 31 and 32 have not been placed in their proper alphabetical order through mistake

TABLE 17

Terms for Physicochemical Processes

Name and reference	Modern equivalent
1 ANTARDHŪMA *Ci* **15**, 174	Combustion *in closed vessel (internal* combustion)
2 AVASIÑCANA *Vi* **7**, 25	Moistening
3 AVISAMPLAVANA. *Śa* **6**, 23	Flushing in a current of liquid
4 BHĀVANA *Vi* **7**, 16	Impregnating with liquid
5 BHṚSTA *Su* **4**, 15	Roasting
6 DĀHANA. Ci **15**, 17	Combustion
7 DRAVA *Śa* **8**, 41	Solution
8 GATARASA *Vi* **7**, 17	Evaporated residue
9 JARJARĪKARANA *Ci* **26**, 244	Trituration
10 JUṢA *Ni* **8**, 136	Liquid extract
11 JVALANA *Su* **12**, 8/3	Ignition
12 KALKA *Sū* **4**, 7	Paste
13 KHEṬABHŪTA *Śa* **4**, 9	Coagulated
14 KHINNA *Su* **27**, 254	Boiled
15 LEHA *Vi* **8**, 136	Tincture
16 MANTHANA *Vi* **5**, 22	Churn ng
17 MRDUPĀKA *Su* **27**, 275	M ld heating
18 NISKĀTHANA *Ci* **15**, 174	Evaporation to dryness
19 PARIPŪYANA *Vi* **7**, 26	Straining solids from solid l quid mixtures
20 PĀTANA *Ci* **26**, 59	Distillat on precip tation
21 PHĀNṬA, *Su* **4**, 7	Infusion
22 PHENA *Vi* **7**, 23	Foam or froth
23 PHENAMĀLĀ *Ci* **23**, 110	Effervescence
24 PISṬASVEDANA *Ci* **1/1**, 58	Steaming of sol ds
25 PRASĀDĀ *Ci* **4**, 80	Clear supernatant *l quid*
26 SĀDHANA *Vi* **8**, 140	Bo l ng
27 SAMYOGA *Ni* **5**, 22	Chemical combination
28 SĀNDRA *Śa* **6**, 16	Viscous
29 ŚAUCA *Vi* **5**, 22	Clarification of turbid liquid

TABLE 17

Terms for Physicochemical Processes (contd.)

Name and reference	Modern equivalent
30 SIÑCANA *Śā* 8, 19	Addition of water
31 ŚITĪBHŪTA *Vi* 7, 26	Cooled
32 ŚOṢAṆA *Vi* 7, 22	Desiccation
33 SṚTA *Śā* 4, 7	Macerated with liquid
34 SRUTA *Ci* 15, 172	Percolated with water
35 SUKṢMACŪRṆA *Vi* 7, 22	Impalpable powder
36 SUPŪTA *Ci* 1/3, 3	Filtered liquid
37 TAILAPRAPĪḌANA *Vi* 7, 25	Extraction of oily matter
38 UDGHṚTYA *Śā* 8, 41	Suspension of solids in liquids
39 UPAHITA *Vi* 8, 140	Intimately mixed
40 UPASAṂSKARAṆA *Vi* 8, 140	Filtration
41 UPAŚOṢAṆA *Su* 12, 8/3	Evaporation
42 UPASVEDANA *Ci* 1/2, 14	A special process of distillation
43 VIGATASNEHA *Vi* 7, 22	Extracted from fatty or oily matter
44 VIRŪKṢAṆA *Śā* 5, 4	Dehydration

TABLE 18

Mechanical and Physical Terms

	Name and reference	Modern equivalent
1	ĀKUÑCANA *Śa* 7, 16	Contraction
2	AVAGĀHANA *Vi* 6, 16	Immersion
3	AVAGHAṬṬANA *Vi* 7, 17	Vigorous stirring
4	AVALEPANA *Vi* 7, 23	Surface coating
5	CUSANA *Ci* 23, 26	Suction
6	DHĀRANA *Śa* 7, 16	Retention
7	EKĀVARTA *Ci* 23, 109	Spiral
8	GAMANA *Śa* 7, 16	Motion
9	GRAHANA *Ni* 5, 22	Measurement
10	KṢODANA *Vi* 7, 22	Pulverization
11	MĀRGA *Su* 6, 4	Trajectory or orbit
12	PARICCHĀYĀ *In* 7, 9	Penumbra, aura
13	PARINĀHA *Si* 3, 7	Circumference
14	PARYANTA *Vi* 8, 117	Distance between extreme points
15	PRAPĪḌANA *Vi* 7, 25	Rubbing
16	PRASĀRANA *Śa* 7, 16	Expansion
17	PRASTARANA *Vi* 7, 22	Spreading in layer
18	PRERANA *Śa* 7, 16	Impulse
19	SANTĀNAGATI *Su* 12, 8/3	Continuous motion
20	SUṢIRA *Sū* 12, 7	Porous
21	TATTVA *Śa* 1, 55	*Reflected image*
22	TRIDAṆḌA *Su* 1, 46	Tripod
23	UNMARDANA *Ni* 6, 16	Abrasion
24	UPĀÑGA *Su* 5, 86	Lubrication
25	VYĀMA *Sū* 14, 43	*Unit of length*

Table 19
Weights and Measures
(*Ka* 12, 87-97)

The smallest unit of weight is that of a *Dhamsi* (minute particle)

6 DHAMSIS	1 MARICI
6 MARICIS	1 SARSAPA (Mustard seed)
8 SARṢAPAS	1 TANḌULA
2 TANḌULAS	1 DHĀNYAMAṢA
2 DHĀNYAMĀSAS	1 YAVA
4 DHĀNYAMĀṢAS	1 ANḌIKA
4 ANDIKAS	1 MĀŚAKA or DHĀNYAKA
3 MĀṢAKAS	1 ŚANA
2 ŚAṆAS	1 DANKSANA or KOLĀ or VADARA
2 DAÑKṢAṆAS	1 KARSA or SVARNA or AKSA or PICŪ or VIḌĀLAPĀDAKA or PĀNITALA or TINḌUKA or KAVALAGRAHA
2 KARSAS	1 ŚUKTI or AṢṬAMIKA
4 KARSAS	1 PALA or MUṢṬI or PRĀKUÑCANA or CATURTHIKĀ or ṢOḌAŚIKA or ĀMRA
2 PALAS	1 PRASRTA or AṢṬAMANA
4 PALAS	1 AÑJALI or KUḌAVA
4 KUḌAVAS	1 PRASTHA
4 PRASTHAS	1 ĀḌAKA or PATRA
8 PRASTHAS	1 KĀMSA
4 KĀMSAS	1 DRONA or CARMANA or NALVANA or KALASA or GHATA or UNMANA
2 DRONAS	1 ŚURPA or KUMBHA
2 ŚURPAS	1 GONI or KHĀRI or BHĀRA
32 ŚURPAS	1 VĀHA
Also 100 PALAS	1 TULĀ

Later commentators have equated the *Karṣa* to 2 modern *Tolas* This makes the *Tula* equal to 9 33 kilograms

TABLE 20
Terms for Physical Properties
(Su. 25, 36, 26, 11)

Name	Modern equivalent
1 DRAVA	Liquid, melt
2 GURU	Heavy
3 KAṬHINA	Hard, solid
4 KHARA	Rough
5 LAGHU	Light
6 MANDA	Mild, weak
7 MṚDU	Soft
8 PICCHILA	Slippery
9 RŪKṢA	Dry
10 SĀNDRA	Viscid
11 SARA	Mobile, fluid
12 ŚĪTA	Cold
13 ŚLAKṢṆA	Smooth, polished
14 SNIGDHA	Oily
15 STHIRA	Firm
16 STHŪLA	Stout
17 SŪKṢMA	Fine
18 TĪKṢṆA	Sharp
19 UṢṆA	Hot
20 VIŚADA	Scattering

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ERRATA

Page vi,	line 27	from the top,	*for*	Siences,	*read* Sciences
„ 2,	„ 19	„ „	„	„ slokas	„ *slokas*
„ 27,	„ 5	„ „	„	*Jivaniya*	„ *Jivaniya*
„ 30,	„ 4	„ „	„	PRASAH-VARGA	„ PRASAHA VARGA
„ 52,	„ 17	„ „	„	(column 4) *for* ringworms	„ ringworm,
„ 88,	„ 16	„ „	„	(column 2) „ souredmilk	„ soured milk